DOCUMENT RESUME

ED 063 265 SP 005 737

AUTHOR	Weldon, John J.
TITLE	Model: An Authentic Teacher Education Program.
INSTITUTION	Mount Mercy Coll., Cedar Rapids, Iowa.
PUB DATE	72
NOTE	184p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Educational Improvement; Educational Innovation; *Educational Programs; *Performance Criteria; *Teacher Education; *Teacher Education Curriculum; *Teacher Programs

ABSTRACT

The Education Department of Mount Mercy College designed the following new model for teacher education. The "traditional innovations" like portal schools and the concepts set out in "Performance-Based Teacher Education: What is the State of the Art?" (SP 005475) were included in the model. In addition, a synthesis of the following were included in the model: The curriculum as primary; a complete initial observation period at all levels of the elementary and secondary schools; primary stress on learning by doing; primary stress on teaching by example-setting; use of modules previously researched and validated by a larger institution, but leaving these modules open-ended to accommodate both our local situations and all the ingredients of a humanistic program; the use of task analysis; 4 years of on-site training experiences in elementary and secondary schools for all students, at least one-half day a week; provision for training students how to teach the disadvantaged, the culturally different, the urban and rural poor; preparation in the many innovations currently in use in the schools; some work in special education problems; open-ended evaluations of students; 2 years of intensive followup by weekly seminars for beginning certified teachers; continuation of provision of consultive guidance and other services during the professional lifetime of the teachers; equality with cooperating school districts through their membership of the teacher education committee. A 39-item bibliography and appendixes are included. (Author/MJM)

ED 063265

FILMED FROM BEST AVAILABLE COPY

MAY 31 1972

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

MODEL:

AN AUTHENTIC TEACHER EDUCATION PROGRAM

SP005737

MOUNT MERCY COLLEGE

CEDAR RAPIDS, IOWA

1972

ABSTRACT OF THE MODEL OF
AN AUTHENTIC TEACHER EDUCATION PROGRAM
FOR MOUNT MERCY COLLEGE
CEDAR RAPIDS, IOWA

BACKGROUND: The Education Department of Mount Mercy College has designed a new model for teacher education.After a study of curriculum history, a look at the weaknesses of traditional programs, and a survey of the needs of our elementary and secondary schools for better teachers, we asked ourselves what we could do. We are a small, Catholic liberal arts college; we lacked funds for consultants or for released time for our staff for study. By working late in the evenings over a period of many months, we believe that we have developed an excellent program.

UNIQUENESS: What is new about our Authentic Teacher Education Program(ATEP) ? All the models(performance-based) that had been funded by the Office of Education, as well as models certified as good or excellent by AACTE were inspected. By leaving out the weaker parts of all these models and by including the strong points, we were able to design a comprehensive and well-integrated model; we also added a few new ideas that we thought had been validated by previous research in other areas of education.Thus, we believe that our ATEP Model is different in kind, degree, comprehensiveness, integration and workability from the models that we had studied; this is our claim to uniqueness.

MODEL FEATURES: All the "traditional innovations" like portal schools and all the concepts set out in Performance-Based Teacher Education:What Is The State of The Art? (Stanley Elam,Editor, AACTE,Washington,D.C., 1971) were included in our model. In addition, we synthesized the following into our program: The curriculum as primary; a complete initial observation period at all levels of the elementary and secondary schools (by our students); Primary stress on learning by doing; Primary stress on teaching by example-setting; Use of modules previously researched and validated by a larger institution, but leaving these modules open-ended to accomodate both our local situation and all the ingregients of a humanistic program; The use of task analysis; Four years of on-site training experiences in elementary and secondary schools for all students,at least one-half day a week; Provision for training students how to teach the disadvantaged, the culturally different, the urban and rural poor; Preparation in the many innovations currently in use in the schools; some work in special education problems; Open-ended evaluations of our students;two years of intensive followup by weekly seminars for our beginning certificated teachers;continuation of provision of consultive, guidance and other services during the professional lifetime of ATEP-prepared teachers; Equality with our cooperating school districts through their membership on our teacher education committee, the control body of the ATEP Program.

SUMMARY: We believe that this model blueprints the necessary middle ground,using the best of education and experience for producing authentic teachers;we need them today.

THE MODEL OF

AN AUTHENTIC TEACHER EDUCATION PROGRAM

FOR

MOUNT MERCY COLLEGE

CEDAR RAPIDS, IOWA

PREFACE

From an extensive review of the literature, especially that literature reflecting the current situation in education as opposed to what many knowledgeable educators think should be the current situation, it appears that teacher education is at the heart of these concerns. It undergirds so many of the surface problems stated.

Although for years educators have been concerned with improvement of teacher education programs, it has been only in recent years that:

1) either funds had been available to test older recommendations, or:

2) research monies were available for experimentation, research, development and testing of new ideas about teacher education preparation.

Perhaps the development of a curriculum (designer's plan and its implementation: instruction) which is relevant to the needs and wants of students, teachers, administrators--the entire education community--as well as a curriculum sought after by the various governmental units, patrons, taxpayers, and the general American public, perhaps this curriculum development is the large and unresolved problem in the preparation of the future teachers of our children, young people, and many adult citizens. This development of curriculum is a difficult task; it must be a direct reflection of the knowledges, skills, attitudes, and values of the past, present, and desired future of our culture. The nexus

of this challenge lies in the fact that we are hard put to keep up with ever-increasing knowledge, to keep "on top" of our technology (remembering the warning of de Tocqueville and to sort out the good, the true, and the beautiful, amid rapidly changing value systems. So it seems that to prepare teachers with the ability to adopt and change with the changeable, to hold fast to the unchangeable, and to be wise enough to know the difference, this is the heart of the curriculum task in the preparation of teacher educators.

At Mount Mercy College, over the years, the faculty has acquired a well-deserved reputation for educating elementary and secondary teachers of the highest excellence. It is to continue earning this reputation that we have decided to make certain fundamental changes in our teacher education programs. We believe that the programs, to date, have provided authentic teachers; the word "authentic" has, however, taken on some new meanings and to contrast the new program at Mount Mercy with other programs at some other places where we believe they perhaps are not doing their purported job, we have named it: <u>An Authentic Teacher Education Program.</u>

The model plan for this program, within a two-year period, will shift the foci of The Teacher Education Program from the course concept to the module concept. Many programs of this type, that we have studied, have had a number of defects; while we certainly will <u>not</u> turn out a perfect program, we have taken

certain steps to insure that Project A.T.E.P. (Authentic Teacher Education Program) will not be a mechanical program. Rather, we have sought to do something different: to accommodate a criterion-referenced program within the guidelines of a real, humanistic education for prospective teachers.

Project A.T.E.P. is designed, finally, to furnish the public and private elementary and secondary schools of Central and Eastern Iowa with more human, more accountable, more responsible, more knowledgeable, and more highly-skilled teachers for the present and the future.

Cedar Rapids
February 14, 1972

John J. Weldon

TABLE OF CONTENTS

		Page
PREFACE		ii
Chapter		
I	INTRODUCTION	
	The Setting of Teacher Education in the 1970's	1
	The Rationale of the Model	9
	Summary of the Model	10
II	REVIEW OF THE LITERATURE	
	Review	16
	Summary	28
III	THE DESIGN AND SUGGESTED IMPLEMENTATION OF THE A.T.E.P. MODEL	
	The Complete Model	29
	The Pilots.	85
IV	SUMMARY; CONCLUSIONS; RECOMMENDATION.	86
BIBLIOGRAPHY		
APPENDICES		

CHAPTER I

INTRODUCTION

The Setting of Teacher Education in the 1970's.

Background

So many things are being discussed today, and are being tried out currently in teacher education that it was thought to be educative, to take a look at Curriculum History.[1] A look at history will serve to establish a reference frame for the study. Curriculum today is not only at the heart of the process for the preparation of teachers, but it is being regarded more and more as the specialized area of study from which the answers will have to come, answers which American society demands of its schools and of the education profession. Is the curriculum of teacher training institutions adequately preparing future generations of American teachers to cope with the real and rapidly-changing world of education, "out on the firing line"? Perhaps we should first consider education:

> Many people today, including educators, are confused about education. They look for guidance in a world torn apart by greed, hate, differences in political philosophies, race, religion, and national origins, and by prejudice, ignorance, fear, hunger, the generation gap, and pollution of the earth's environment. As people all over the world[2]

---

[1] Weldon, John J.,"Curriculum History: A Synopsis" (Unpublished manuscript, Carbondale, Illinois, 1970).

[2] Ibid., p. 1

have looked to learning, scholarship, and education to solve their pressing and immediate problems, in most cases they have found education to be of too little value. They have found it, more often than not, out of touch with the complex problems of everyday life in a world full of crises and problems demanding solutions. What is wrong?

Quot capita, tot sententiae would be an accurate description had Horace been asked that question. "There are as many opinions as there are heads!"

An examination of history may provide an answer to the question, "What is wrong with today's education?" For thousands of years of man's history on earth the primary institutions that man had set up to regulate the social interactions between people operated in at least a somewhat predictable fashion. Religion, government, education, the family and clan--all these shared the burdens of a more primitive world. Each institution (and even these functions before they became institutions) had certain limits. There were the forces of law, custom, and mores to specify who was to design the specifics of the child's training from the earliest recorded times. There was little confusion recorded in the history of early education.

So perhaps the more relevant question to ask would be: "What has happened to the large society of man in general?" And many would answer that man has learned to build a world of "man-extensions" (machines) that have shortened time, reduced distance, eliminated drudgery (for many) and by so doing man has televised and transported himself into the sacred privacy of most other men. Time and distance are no longer shields between radically different cultures of man. The result is mass confusion, anxiety, fear, and jealousy. In the world neighborhood that was created before man fashioned new institutions to deal with it, differences become so mangified and motives so misunderstood that it seems to many that it is preferable to be torn asunder from each other. And so it is today. And that is reflected in education.

Tentatively, this seems to be an accurate appraisal. However, another fact is certain; the family, the church and the state have been in the process of shifting many of their obligations to the schools. The schools have become the resource center for society, yet the schools are confused about their role.

Can education stand in this caretaker's role for society's primary institutions? Can education wait until these institutions "tool up" the necessary social skills, physical and environmental controls, distribution channels, and other requisites for a sane and rational life in a technological society? Some think education can do this, and more, if it rediscovers itself.[1]

---

[1]Ibid., pp. 2-4.

> What does this mean? Some educators believe that not only the institution of education but even the very function of education is so misunderstood that truly what passes for much of our education, today, is irrelevant nonsense. This is not because of a lack of dedication, but rather, a lack of a workable understanding of the complex nature and function of education. Educational theory has not only kept pace, but, in many instances, is ahead of technological progress; educational practice, for the most part, is far behind it.
>
> Counts and Brameld would most likely agree that education can best aid in the reconstruction of society by the concurrent reconstruction of men. In fact, education can lead the way. They might also agree that first it is necessary to put rational theory into practice, and to understand the nature and function of education. Certainly education essentially means the teaching function and teachers...[1]

The last point seems to be widely misunderstood today. The teacher, the curriculum (plan and implementation), and the students constitute the real school and all else is of an ancilliary nature: administration; supportive services, technology; finances; the school plant. All these exist only to help the teacher carry out the curriculum. When any person or any technology or any system gets in the way or contraindicates this fundamental and historically-valid philosophy of education, then it hurts the education of our children and young people. Not all that has been rpeated, over the years, is therefore sound; much education still neglects to put into use the results of sound educational research; this is especially true in regard to learning and the learning process and also to the disregard of the laws of human growth and development. On the other hand, not all that is new and shiny is therefore valid, reliable and relevant; much of the new is of the nature of an educational fad and not yet proven to be of valid replacement value. When we first have determined if we understand education itself, we will then be in a better position to determine the optimum preparations of our future teachers.

---

[1] Ibid., pp. 3-4.

What can be done to help? It should be realized that education is a learned art relative to the teaching-learning process. Education is also a science, a discrete discipline,[1] having its own body of knowledge in the social science area. Furthermore, education, considered from the viewpoint of society, is a primary institution of man for transmitting the cultural heritage, preparing man to live in today's world, and getting him ready for life in tomorrow's world. Finally education is the best available tool for solving many of man's problems.

In this study the heart of education is curriculum. Curriculum in this context means the designer's plan for learning and its implementations (instruction). The curriculum specialist, in this same context, is a generalist in all fields of knowledge...and a specialist in curriculum...one who is qualified to know: how much, when, where, by whom, how, for what reasons, in what combinations--to draw on the various knowledges, to bring the optimum combination to bear on the solution of a specific educational problem, whether it be for one person, one classroom, one school, one district, one state, one nation, one world. Thus the curriculum specialist deals in the logistics of education.

> When education and curriculum are considered in this context, one can begin to see that perhaps curriculum can indeed not only "serve as caretaker," but that this evolving discipline is the tool that education can use: (1) in understanding its purpose and function and relevance in today's world; (2) in helping to take the lead in the reconstruction of society; and (3) in preparing its clients for life in tomorrow's world.[2]

From the above, it becomes easier for us to understand how very important the curriculum plan is for teacher training institutions. Make no mistake about it, as these future teachers are taught (foremost, by example) so will they teach. If they have suffered through four years of lectures and note-taking, if they have been bored to death, if they have failed to see relevance in their educational preparation--after they are teachers in our elementary and secondary schools they will indeed "teach to death" instead of guiding learning and setting the stage for it to take place. If

---

[1]Belth, Marc, Education as a Discipline. (Boston: Allyn and Bacon, Inc., 1965), p.22.

[2]Weldon,"Curriculum History," 1970, pp. 5-6.

our new teachers do not understand the nature of curriculum and instruction and do not understand how to make relevant and required change, how will we educate for the future that is already here? Ralph Tyler puts the matter right on the line when he says, "our current failure to educate approximately one-third of the youth enrolled in high school is due to the inappropriateness of the program to supply them with the kind of learning required."[1]

If teachers are not prepared in the best possible way it seems logical that the situation Tyler describes will get worse. Most of our current teacher training programs are still graduating "Dick and Jane" teachers. They have just not been prepared to do the job that today's world and its realities place upon their shoulders. Many leave the profession and many who stay do more harm than good. The model proposed in this study is submitted as a better way to prepare teachers for the many tasks they will have to face. Much more will have to be said of it for as Van Til (1970) said: "The struggle among forces in society for control of curriculum change grows sharper.[2] Social forces both inside and outside of education are bringing much pressure to bear on the preparation of future teachers. Many valid questions are being asked of teacher training institutions. The most significant question of them all is: What is the curriculum for the training of the future teachers of America? Is it relevant? Is it adequate? Is it interesting? Is it in accord with what we know from educational research? Does it have a philosophical basis or viewpoint? Does it permit practicing teachers to have a voice in, and to help prepare future teachers?

---

[1]Ralph W. Tyler, "Investing in Better Schools," in Agenda for the Nation, ed. by Kermit Gordon, (New York: Doubleday and Co., Inc., 1969), p. 213.

[2]William Van Til, Guest Editor, "Curriculum for the 1970's," Phi Delta Kappas, LI:7 (March , 1970), p. 345.

The Setting

Teacher Education, or the preparation of personnel for the education professions is the largest of all and the less integrated of any professional preparation. Look at the decision makers: the colleges offering teacher preparation programs, the state legislatures, the state boards, the state departments of education, the regional accrediting associations, the national accrediting associations, the NEA and all its sub-organizations, the AFT and its affiliates, the professional associations and learned societies, the private foundations (who fund projects and research), all the cooperating school districts, schools, principals, cooperating teachers, business, and all three branches of the federal government, especially the Office of Education. And so, money, power, and politics, or as Dr. George S. Counts would put it--"Social Forces"--all these affect the preparation of America's teachers and it is difficult to find authentic and uniform guidelines that can be trusted and adhered to.

School is a trap for many poor children who learn from middle-class teachers who do not either know how to teach them or how to meet their real needs; we have called them educationally disadvantaged or culturally deprived but we are not preparing teachers, by and large, to help disadvantaged youth in the problems of their self-perpetuating sub-cultures, especially the integrating sub-culture of poverty. We offer an irrelevant curriculum that will not help them in the real world they have to live in; no wonder they hate schools and long for an education.

The schools of the poor are not culturally staffed, not provided with enough money, and not in touch with community needs. In spite of all this, it is the schools that are expected by society to overcome the myriad complexities of this problem, and we are to prepare the teachers! Most teacher preparation programs seem to have no real policy, research, or relevant experience in back of them. They have just grown up "like Topsy" or some new fad has been placed in a teacher training institution just because someone else has one. Perhaps we need less policies, programs, etc., etc., and <u>just one good model</u> for the training of a real live teacher who understands the latest in education, the differences in cultures and in children, the similarities, and how to respond professionally in any given situation; a teacher who knows about people, their everyday lives and the many worlds his students have to live in today, and will be a part of in the fast approaching tomorrow.

Perhaps we need a model for teacher education that refuses to turn over training and accountability to non-professionally trained laymen and profit-hungry new businesses that are springing up rapidly; these latter are not professional in that stockholders are their clients and patrons--not children and parents. Let us face reality; if we are not to lose control of our profession a new partnership must quickly be made between equals: the experienced and practicing teachers in our elementary and secondary schools and our institutions of higher education who are training teachers. Teachers should not only concurrently train their successors along with the resource persons

in colleges and universities, but they must also share equally in both determining the total preparatory curriculum and in determining the qualifications for membership in the profession. Educational organizations should be consulted, but the real decision-making must be joint between teachers in the field and departments of education in colleges and universities. Certainly families, communities, governments must also be consulted, but the joint relationship above-named must carry the final responsibility. And any model for the education of teachers must reflect this.

The curriculum that the partners agree upon is the tool that will provide the teachers that we need. If we want teachers who care for our children, teachers who recognize and work with individual differences, teachers who can design a learning system that is humanistically-oriented then we must so train the teachers for to repeat, : they will teach as they have been taught. If we want teachers to be able to prepare children for the many tasks of living in today's world, they must be taught how to perform the needed tasks; only teachers trained in a performance-based program will be able to do this task in a satisfactory manner; only teachers who have been trained to use machines for human purposes will be able to do this task in a satisfactory manner.

Competence in teachers must be assured and the model for any authentic teacher training program must accommodate this concept; and the competence must be on a high level.

When such a program is combined with humanistic learning concepts, a supply of teachers with social responsibility and educational professionalism will be assured.

The Rationale of the Model

When we have seen that a problem exists in the preparation of teachers, when the research has shown the several facets of the problem and different researchers have demonstrated proven and valid solutions to each of the facets, then it is up to us to put together proven components that will provide at least tentative solutions to the problem.

A unitary model is needed based on the facts that a need for this model has been demonstrated and that it is within our competence to provide such a model. While such a model must accommodate a number of concerns, the literature and research seem to indicate that educators have proceeded in two different directions, primarily.

A number of models are competency or performance-based, but in practice tend to mechanize or "Skinnerize" the preparation of teachers. In their application they accomplish very much in many needed areas but they fail in the humanization of education. Other models for teacher preparation tend to be too informal and to "Rogerianize" the preparation of teachers. It is true that while we have found out that students change their behavior more

because of feelings and beliefs than because of external forces, that individualization of teacher education in itself is not enough. Substance, however human, without form will negate the equally-essential cognitive dimension of teacher preparation.

To quote Horace again, "In medio stat virtus". By including both of the above-mentioned components but by not becoming extremists in either, it would seem that we could provide a very workable and very human teacher education preparatory program.

This then, is the reason for the implementation of what we believe is an Authentic Teacher Education Program at Mount Mercy College. The Model, whose design is to be related later in this study, accommodates both thrusts described above. In fact, it includes all of the necessary components that we believe research has validated and contemporary society requires if the teachers needed for today's world are to be properly prepared.

Summary of the Model

Many better components must be integrated into one workable and valid model for the preparation of authentic and professional teachers for children, youth, and adults. This world of the 1970's produces a myriad of social forces which compel lay citizens to demand good teachers "worth their salt."

The way educators can answer these proper concerns is to first be certain they, themselves, have a proper, valid and true understanding of the primary social institution of education; they must also see the appropriate teacher education curriculum as the needed tool for obtaining the proper kind of teachers. Then they must design a curriculum for future teachers that accommodates all of the necessary components and includes all the required concerns. While there are many new models to follow, perhaps it might be better to design a newer model that includes what is needed, but most of all, in the right mixture. At Mount Mercy College we believe that we have designed such a Model; we call it: The Authentic Teacher Education Program, or the A.T.E.P. Model.

The program is performance-based, that is, before any instruction takes place the goals of performance are set out in detail and an agreement on them is reached between the teacher and the student. The proof that the student has learned is in the demonstration of his ability to teach in the appropriate manner, or in the showing of behaviors that we know promotes the learnings that are desired in his future students. Grades are eliminated and the student is rather accountable for attaining a specified level of ability in specific teaching tasks. Mount Mercy College is then able to hold itself accountable for the production of good, authentic, relevant, and skilled teachers. Three types of criteria are used: knowledge criteria to measure cognitive understandings; performance criteria to measure teaching behavior; and product criteria. This latter measures the

ability of the student in teaching by assessing the achievements of elementary or secondary students that he has taught; in this latter measure, the old maxim seems to hold true: "the proof of the pudding is in the eating." Or as the army would put it: "if the teacher has taught, the students will have learned, and visa-versa.

The instruction is individualized and personalized and humanized. Feedback guides the student's future learnings. A system is followed and it emphasizes exit requirements, not entrance requirements, as in traditional teacher education programs. The instruction is provided in modules, not courses. A module can be described as a set of learning activities with objectives, prerequisites, pre-assessment, instructional activities, post-assessment, feedback and remediation (as needed). The student is accountable for his own education; however, resources and teachers are always on hand to assist him. The program is site-oriented, that is, laboratory experiences are provided through all four years of preparation; experiences in real elementary and secondary schools with real pupils. Representatives of the school system along with college professors work together to produce the desired type of teachers; in other words, the authority and responsibility of the college for preparing teachers is equally shared with the public and private schools; in this way teachers have a voice in the preparation of future teachers and in the entrance requirements to the profession. Students are allowed to participate in the design of their learning program; this is to teach them to begin to make decisions.

The program will take full advantage of using the input of the skills and experiences of many master teachers now serving in the public and private schools of Eastern Iowa. The modules used will be adapted from the Wilkits of Weber State College; this college's program has ranked first in the evaluation of the American Association of Colleges for Teacher Education (AACTE). These modules will be left open-ended for the individual use of each teacher and student. Other modules will be locally prepared. The program also will include preparation in the teaching of the culturally deprived, often a neglected component, and preparation of para-professionals in education; to accomplish the latter, it will use the task analysis and career ladder concepts of the federal government's Career Opportunities Program.

We will certainly include humanistic education as a necessary component of our Model. We have found out through the findings of research that students change their behavior and learn, not so much because of external forces exerted upon them, but rather because of their interior feelings, convictions, attitudes, understandings, and most of all, their beliefs.

Cooperation must be accommodated in the model as well as competition; grades will not be the motivators; the teacher in the program must be recognized as a skilled professional guide, not the source of all knowledge. Future teachers must be held accountable but their behavioral objectives in this program must never narrow the door to learning by the use of a closed system. All behaviors cannot be evaluated and our model must not pretend that they can. Many gross changes in behavior can be evaluated, however.

Information must be provided by various means, (including direct teaching), however, the meaning of the information will usually require the intervention of the teacher. The model will completely accommodate the quest for personal meaning and it will recognize that many learnings have already come to the student via television, peers, and travel. Different activities will often have to be provided by the teacher for different students, and there may be no module but the teacher!

Our model does not pretend to have final answers; teachers and students together must work out problems constantly, in an open system. The greatest work of the teacher will be to set the stage for learning, turn on the necessary lights, point out the way and then let the student learn. The teacher must always be available as a resource person when the student "takes a wrong turn down a dead-end street." Usually, as students continue to keep performing teaching acts and utilizing feedback from their mistakes, they will finally become skilled is the teaching acts.

In the Authentic Teacher Education Program, all the books, media, learning resources and materials, and personnel must be in gear to serve the preparing teacher. The teacher teaches best by the way he lives his own life; part of the example he sets rubs off on students; the way they are guided into the teaching act is the same way they will later be guided in their own teaching.

These students, in the model, will be led to realize that they will be the representatives of a pluralistic society and a multi-culture. To change student behavior, we have to

understand the personal meaning of it all to the particular student, for the way the student sees it--that is what will influence his behavior.

Although we will draw on the proven research of others by using the Weber State Wilkits as a starting point, these modules must never be presented as completely packaged but always open-ended for our products are people, not robots of a system; the modules must be accommodated by the teacher to fit the varieties in creative thinking, caring, and valuing the good, the true, and the beautiful. Mind learning and heart learning must fit together in this program, and it does; in this manner it becomes a workable education for rational and emotional thinking, choosing and loving human beings.

Perhaps the most outstanding component of the program is the provision for future teachers to be provided with a very large share of their professional education right in the middle of the real world of teaching.

This, then, summarizes the principle aims and the principle means of attaining them in the Authentic Teacher Education Program of Mount Mercy College. We have a Model for the integration of of humanism and technology in the education of our teachers. They are human beings, teaching human beings, and they live in an ever-increasingly more complex technological world and universe; our teachers will need to be skilled in the best of both; we believe that our Model A.T.E.P. has provided for this twin need.

CHAPTER II

REVIEW OF THE LITERATURE

Review

Patricia Cayo Sexton in her latest work, School Policy and Issues in a Changing Society[1] has reinforced our belief that the teacher is the real school! She says that there are today many participants in school policy making: community; school administrations; teachers; students; and most significantly--federal and local government. In the preparation of teachers she believes that the following knowledges should be included: Equality and Racial Integration; Intelligence Testing (when valid?); Community Control of Schools; Teacher Organizations; The Student Movement; Reform; Change and How to Go About It; Fiscal Problems; New Models in Teacher Education.

These are indeed some of the central points to be included in the preparation of teachers.

Because of the plentiful supply of teachers in the face of a deteriorating financial situation in America's schools, a number of schools preparing teachers are going to limit the entrance requirements to teacher education programs. They will

---

[1]Patricia Cayo Sexton, School Policy and Issues in a Changing Society. (Boston: Allyn and Bacon, Inc., 1971)

do this at the University of Iowa, according to Dean Howard Jones, by using a screening committee. This committee "will admit a limited number of applicants on the basis of three major criteria: 1) Experience in working with children. 2) Previous academic record. 3) Results of aptitude and achievement tests."[1]

This is an example of the old traditional emphasis on entrance requirements. Latest research tells us that it is better to emphasize exit requirements, that is, let anyone try to become a teacher but only those will be certified to teach who have demonstrated their competency in teaching. The Department of Public Instruction of the State of Iowa has encouraged Mount Mercy College to prepare teachers in this manner. Moreover, many other Colleges and Universities are altering their curricula to stress practical experience over theory in the education of teachers.

If anyone thinks that a specified learning model for preparing teachers is a new idea he should consult Dr. Henry Morrison, the noted authority on unit teaching. Dr. Morrison specified this procedure: "Pre-test; teach; test results; adapt procedure; teach; test again."[2] His book was written in 1926.

The case for linking personal behavioral objectives with the cognitive is strongly made by Weinstein and Fantini when they state that although knowledge can generate feeling, it is feeling that generates action.[3] Another reason for linking a performance-based curriculum with a humanistic education.

---

[1] Howard Jones, College of Education Bulletin, Feb. 10, 1972, University of Iowa, Iowa City, Iowa.

[2] Henry C. Morrison, The Practice of Teaching in the Secondary School, (Chicago: The University of Chicago Press, 1926.

[3] Gerald Weinstein and Mario Fantini, Toward Humanistic Education: A Curriculum of Affect, (new York: Praeger Publishers, 1970)

When anyone attempts to develop a new curriculum Hilda Taba's Seven Steps should be kept in mind:

" 1. Diagnosis of needs
2. Formulation of objectives
3. Selection of content
4. Organization of content
5. Selection of Learning Experiences
6. Organization of Learning experiences
7. Determination of what to evaluate and the ways and means of doing it."[1]

The Weber State Modules seem to follow her steps and these are the ones that our program will use as a starting point.

Bernard Bard reports the following: "The price that will be paid by colleges and universities that fail to recognize--and act on--the revolution in higher education was outlined today by a major firm of educational consultants.

"Knowledge Industry Publications, Inc., of White Plains, said that those schools that fail the challenge will surely go under, no matter how many decades or centuries of tradition lie behind them.

"The Revolution, it said, comes from two directions--new technologies and new systems for providing college education outside the conventional classroom, and a growing rebellion by youth against the 'unquestioned social rite' of going to college.

"Institutions that fail to break out of the 'straight-jackets of established procedure,' the report said, will be overwhelmed."[2]

---

1 Hilda Taba Curriculum Development, (New York: Harcourt, Brace, and World, Inc., 1962).

2 Bernard Bard, Education Editor, The New York Post (New York: New York Post Corporation, 1971), November 22, 1971

The Career Opportunities Program like all programs funded by the Office of Education, stresses that the new curriculum is an integral part of the program: "C.O.P. also demonstrates how new and more effective means of training and utilizing school personnel can deliver performance-based learning.[1]

The need for the humanistic element in teacher education--what preservice teachers want--is being recognized in the PTE model being developed at the University of Texas:

> "Somebody is listening to what preservice teachers want. The Research and Development Center for Teacher Education at the University of Texas, Austin, is field testing a program that allows the learner to be the major architect of his own education.
>
> A major premise for the Personalized Teacher Education Program is the assumption that a person learns best those things of immediate concern and interest to him. Research conducted at the Texas R and D Center has demonstrated that a preservice teacher eventually will be concerned about almost everything the professional educator considers necessary but not necessarily in the order the educator might want to teach it...
>
> One possible conclusion was that the typical undergraduate is not prepared to benefit from education courses traditionally sequenced and taught.
>
> Taken another step, then, prospective teachers appear to need some real experience in enactment of the teaching role before they become concerned about the subjects taught in traditional beginning education courses. In fact, the whole traditional teacher training sequence may run entirely in the opposite direction from teachers' concerns...
>
> In fact, research evidence has demonstrated that early concerns must be resolved before prospective teachers can display more mature concerns. Therefore, curricula directed at mature concerns will be wasted on students who have not resolved initial questions about their personal roles in the classroom.[2]

---

[1] EPDA, Career Opportunities Program, Washington, D.C.: U.S. Dept. of Health, Education, and Welfare, Office of Education, March, 1971), pg. 3.

[2] Information Office Conference for Educational Development and Research, "New Awareness," D and R Report, 1:3 (Denver, Colorado: E D and R Information Office, 1971). pp.8-9.

> Personalized education is accomplished through four kinds of procedures. These are procedures to achieve assessment, arousal, awareness, and resolution of teaching concerns and other feelings...
>
> The majority of the undergraduate teacher's time is spent in a public school. Many operating activities normally reserved for the college campus also take place in the schools, such as seminars and lectures... The self-paced nature of most professional training materials used in the program allows flexibility in individual experiences...An important and somewhat new member of the team is the psychological consultant. This person is a resource for the faculty to use in understanding the personal styles and concerns of each student...
>
> The PTE Program is undergoing field trials at Kansas State Teachers College, Emporia, Kansas, and the University of Texas, Austin.[1]

The above seems to validate the need for a humanistic program, but we believe it should be in the framework of a more cognitively-oriented sequence than PTE, namely, that of Weber State College's Wilkit System of Modules and the format they have for their curriculum. So we at Mount Mercy can put together the best of both systems.

In attempting to design a relevant and useful teacher education curriculum it is helpful to know the current career orientations of today's youth; what they think about education and schools, and the pluses and minuses. The National Center for Information on Careers in Education, found the following attitudes of young people toward education:

> General Findings
>
> The following seven general findings offer insights into youth attitudes as they pertain to education and careers.
>
> A preoccupation with changing and improving society is a basic element in the attitudes young people bring to bear on career preferences.[2]

---

[1] Ibid., pp. 8-9 passim.

[2] Youth and Careers in Education. Education and Youth Dept., of Hill and Knowlton, Inc., New York, (Washington, D.C., NCICE office, 1607 New Hampshire Ave., N.W. 20009, 1971.)

When it comes to expressing specific preferences toward careers, youths today are displaying a distinct flexibility, stemming in part from both the social and the economic uncertainities of the times.

One reason some students appear reluctant to consider education as a career is their uncertainty over whether education has the potential for being an effective instrument for bringing about constructive social change.

Another reason students are turned off from education is a negative image they get of the field at first hand as recipients of the educational process.

Differing subgroups give differing reasons for wanting or not wanting to enter the educational field, reflecting the very real differences of individual and group feelings among the varying types of young people.

Students place great stock in personal communication, expressing a desire to receive information about careers on a personal basis through human interaction.

Although they have distinct impressions about education and about careers in the field, for many young people these images are based on myth and not on reliable or factual information.

Specific Findings

The following 27 specific findings highlight the principal reasons young people themselves give as to why they hold the particular attitudes they do toward education and careers.

The desire to use their future careers as vehicles for changing and improving society is a major motivation among students, one they themselves identify.

Most students are optimistic about their ability to eventually bring about changes in society, because of the positive job values they expect to bring to their future careers.

Despite this optimism, there is wide disillusionment with today's society making many students very individualistic and selfreliant in their outlook toward life and careers.

Great stock is placed in originality and creativity, because students regard innovation as an important mechanism for improving society.

Although they claim a lack of interest in material things, many students regard earning a lot of money as a job value of some importance to themselves.

Many students appear extremely flexible about their future career plans, because of a concern over the economic uncertainty of the times and because of a feeling that in times of social change they must keep their options open.[1]

---

[1] Ibid.,

When they do make specific career preferences, students seem to lean more heavily toward people-oriented or service jobs.

Most students hold a set of preconceived images about which of the many careers of society have more presitge and value, and thus are supposedly "better" to enter.

Views Toward Education

The young value education very highly, because they see it as a mechanism for bringing about a better way of life.

...possible interest in a career in education, but a much smaller number actually expect to enter the field. This is partly because many of the young view education as a "compromise" or "second choice" career.

Some students are turned off from careers in education because they believe the field suffers from overall low pay and low prestige.

Many more girls than boys express an interest in careers in education. This is largely because many of the young still view education as a feminine field.

For a number of students, a career in higher education is regarded as far more prestigious and rewarding and as more intellectually challenging than a career in elementary or secondary education.

Many students claim to be turned off from careers in education because they do not like the lot of the teacher, whom they see as the victim of a cold impersonal educational system.

. . . . . .

A number of other students claim they might seriously consider the field if they could be convinced that education in the United States is indeed an effective vehicle for bringing about changes in society and for building a new social order.[1]

Dr. J. Bryan Moffet, Associate Professor of Education at California State College, Fullerton, has listed some ways departments or schools of education can improve their part in teacher training; it is hoped that at this stage, the reader will begin to see many common threads: "Colleges can be more selective in the[2]

---

[1] Ibid.

[2] J. Bryan Moffet, "Teacher Education - Some Ways to improve it". Kappa Delta Pi Record (8:2, December, 1971) p. 47, passim.

employment of persons who will teach the professional education classes...hiring of new faculty should be based on the ability to teach...they (faculty) should be able to transmit the necessary curricular and methodological content to the teacher trainee so that he understands it and can effectively put it to use in the classroom...We cannot forget the truism that we teach largely as we are taught...professors (should) demonstrate the teaching methods we are encouraging future teachers to use...the development of performance modules...development of intern-type programs...making improvements in the student teacher aspect of the program (by) understanding the objectives of student teaching program and how these objectives may be attained...have representatives of the college, the central office staff, and the involved principals sit down together as often as it is necessary to discuss what is to be accomplished with student teachers...hoped-for skills may be described and an understanding of desirable teaching attitudes may be agreed-upon...principals then may suggest supervising teachers possessing the agreed-upon traits, who also appear able to emphasize with and communicate with student teachers...these teachers may then be screened by the college...and should be employed as part of the college staff with appropriate recognition, some reimbursement for their services...Monthly or other regularly scheduled seminars should be held to continue this communication process (between college supervisors and cooperating teachers)."[1]

---

[1] Ibid., pp. 47-48, passim.

Dean Glaydon D. Robbins of Moorhead State College, Moorhead, Minnesota, even goes further:

> "In this time of innovation and change in our elementary and secondary schools, much is dying while much is struggling for birth...Few will mourn the passing of the self-contained classroom, arbitrary grade level and subject matter compartments, ego-destructive marking systems, rigid grouping and scheduling, autocratic classroom control and others, including 19th century school architecture...welcome to the newcomers--individualization of instruction, nongradedness, new school organization, flexibility in grouping and scheduling, continuous progress, team teaching, differentiated staffing, new instructional media and technology...
>
> "Who indeed would mourn...professional education courses, the careful insulation of theory from practice, the deadly monotony of inert ideas presented from well-worn lecture notes, the ridiculous assumption that prospective teachers would not teach as they were taught...the minimal exposure to the reality of the classroom tacked on at the end of the program under isolated supervision called 'student teaching'...Harry S. Broudy has written 'The gap between what we expect from the classroom teacher and the preservice training we provide to meet these expectations is broadening not diminishing'...(We need a) regenerative new design and structure for teacher education and the signs are there...
>
> "The philosophy and vision of John Dewey who related education and experience as inseparable components in the process of learning...Alfred North Whitehead: 'Whatever interest attaches to your subject-matter must be evoked here and now'...
>
> "The recommendation of James Bryant Conant who proposed the 'clinical professor of education'--one skilled in subject matter content and professional education as well as classroom technique...
>
> "The new (1969) standards for national accreditation of teacher education programs (NGATE). Here, sharply delineated, as aspects of the professional studies component of the teacher education program are: (1) 'appropriate laboratory experiences; (2) clinical experience in generic teaching situations'; and (3) the practicum'...a period during which the student tests and reconstructs the theory he has been taught, and during which he develops his teaching style.'
>
> "The decision-making process in professional education program development will shift largely from its theory-oriented people to its experience-oriented people...The experience component in the program...will become the primary, controlling, dominant core of the program which absorbs professional theory and content as an integral dimension...the content[1]

[1] Glaydon D. Robbins, "New Preparation for Teachers," (The Educational Forum, XXXVI: 1, November, 1971), pp. 99-102, passim.

of professional education courses will be fused into the experience component of the program...The fusion of discipline content, professional education, and professional experience will result in the emergence of new qualifications for teacher education faculty members. This new breed must be more than a specialist in a discipline or in an area of professional education, or in teaching method, as in working with a prospective teacher in a classroom--he must be all four...The prospective teacher will move through a series of sequential experential roles--teacher aide, participant observer, assisting teacher, associate teacher, intern teacher, extern teacher--en route to becoming a fully certificated career teacher...Under cooperative arrangements qualified public school administrators and faculty members will become full partners in the program and process. They will assume full and equal status with their colleagues in higher education as teacher educators...The certification and accreditation process within the state will be a cooperative enterprise involving and legal collaboration of professional associations, teacher preparing institutions, local school organizations and the state legal authorities." [1]

It seems as though the new program we are implementing at Mount Mercy College is a little modest, at least initially, when compared with the above professional comments; the comments do show us that if we fail to progress in training teachers, simply we will be no longer training them. The NEA and LEAs are ready to do the job unless we act quickly; if not they, then business. As shown by the following article, the Office of Education is ready to assure progress in education in one way or another!

> "If a career education plan being explored by the Far West Laboratory is judged feasible, employers might assume responsibility for the education of high-school age students.
>
> The Laboratory, under contract to the U.S. Office of Education, is charged with the task of determining the workability of an Employer-Based Career Education model.[2]

---

[1] Ibid., pp. 100-102, possim.

[2] Information Office, Conference for Educational Development and Research, "Employer-Based, "D and R Report, 1:4 (Denver, Colorado: ED and R Information Office, 1971), p. 17.

Basically, the laboratory is conducting a program that will see several selected employers manage a new kind of secondary school. The employers will assume full responsibility for the total educational program in their school. i.e., they will manage and develop such experiences as reading, mathematics and even physical education. In addition, the employers will expose the participating students to a variety of job experiences to give them an understanding of the work opportunities that match their aptitudes and aspirations.

The project is attempting to determine how effectively the merger of the world of education under the management of employers can prepare the student for a satisfying life based on the fulfillment of his long-range career potential.

If the program is deemed feasible, it could serve as an option to students enrolled in existing educational systems: however, it will not replace traditional schools.

The career education concept responds to an identified need. It grew out of a nationwide concern that the public school systems and current vocational programs are not providing students with a successful transition between school and work. Few students have marketable skills or orientation to satisfy work and leisure-time pursuits when they graduate from high school. Even those who participate in work experiences, cooperative education activities, or vocational programs seldom receive orientation to more than one specific career.

Consequently, feasibility studies of the Employer-Based Career Education model are underway at several locations in the country. The Far West Laboratory, assisted by the North-West Regional Educational Laboratory, has primary responsibility for studying the model in the Western states.

Later this year a consortia of employers (e.g., business organizations, industrial firms and governmental agencies) will be asked to submit proposals to indicate how they would generate a career education program in their localities. The Office of Education, then, will award grants to several of these employers in early 1972 to start operating schools by late 1972." [1]

The Office of Education is funding projects like the above to insure a better educational opportunity for all Americans; R and D labs across the land are piloting and institutionalizing Open-Space School in Educational Parks with Multiunit Organization and IGE (Individually Guided Instruction.) Prospective

---

[1] Ibid.

teachers will have to be trained in institutions that are living in today's world and are competent to provide, in partnership with private and public schools, the type of real preparation that is required. The day of the "baby-sitter teacher" with an emergency certificate is over. Our College has realized that fact and planned its teacher education program accordingly. The program will also provide teachers who can work with the Kettering Foundations's I.D.E.A. program--another facet of I.G.E.

The final report of the Iowa Governor's Educational Advisory Committee had some pertinent things to say:

> "Recommendation 35: Flexible career education programs must be developed to allow for differing rates of completion by individual students.
>
> Recommendation 36: The area schools should develop courses and programs on the basis of measures of competence (behavioral objectives) developed by the faculty and advisory groups from business, industry, and the professions." [1]
>
> "Recommendation 41: The area schools should continue to develop programs to meet the specific educational needs of minority groups, the disadvantaged, and the handicapped." [2]
>
> "Recommendation 3:. Colleges and Universities that have teacher training programs must see that the potential teacher begins his classroom experiences early in the training program." [3]
>
> "Recommendation 6: The Committee recommends that individual educational institutions experiment with new educational techniques..." [4]

---

[1] The Final Report of the Governor's Advisory Committee Improving Education for Iowans (Des Moines: office for Planning and Programming, 1971), p. 80

[2] Ibid., p. 82

[3] Ibid., p. 44

[4] Ibid., p. 45

Summary

It is easy to see that Iowans desire their teachers to be ready for the future that already bears upon us. We at Mount Mercy College shall comply with the expressed wishes of the Governor's Commission and the expressed wishes of the Department of Public Instruction.

While thousands of pages could be cited by the latest educational research to validate the programs, we will put into effect at Mount Mercy, in the training of our teachers; we believe enough has been cited to verify in broad outlines what we will do.

CHAPTER III

THE DESIGN AND SUGGESTED IMPLEMENTATION OF THE A.T.E.P. MODEL

The Complete Model

Overview

The A.T.E.P. Model is a deliberate and unified effort to develop a program for the education of elementary and secondary teachers that will try to avoid some of the pitfalls of earlier models and to incorporate some of the better and more successfully evaluated features of the same earlier models. Perhaps almost a hundred programs have been studied in order to provide a basis for intellegent decision making at Mount Mercy College, relative to the specific model needed that would fit the philosophy and objectives of the College and its Department of Education; this Model, like others, has to accommodate the logistics of time, space, place, materials, personnel, funding and management--in order that all fit together in a harmonious pattern that can be implemented in pilot in 1972-73 and in full by 1973-74. There is a <u>total</u> rethinking about teacher education involved here. The Model retains the best of the "old" in teacher education and does not hesitate to implement the tentatively-proven best of the "new". We have journeyed through curriculum history as well as having brought the future to a now-point. We have established a conceptual model and have labored with vigor to bring it into both

feasible and plausible birth. The Model is performance-based so it can portray the direct relationship between the authentic Teacher Education Program (preparation) and the Authentic Teacher's later classroom performance. It achieves this in the context of every significant element of a humanistic education program.

While emphasizing the cognitive domain, human relations skills, instructional procedures and techniques, and the findings of the social sciences are all included in the Mount Mercy Program. The person and the personality of the preparing teacher are stressed. The program at Mount Mercy uses the academic major-minor, general education requirements, professional teacher education modules of instruction combined with four years of on-site "real school" experiences. The Degree requirements of the College are accommodated in the framework of individual difference; that is, some preparing teachers may finish the professional modules sooner and they will obtain more laboratory experience. It is anticipated that the four-year structure will best serve the needs of the program and the students, however, being open-ended, the program could be changed to a three-year program.

The stress in the program is on the "teaching teacher" as a model, by example, to the "preparing teacher". The importance of this stress in the program will allow each preparing teacher to develop to the maximum of his potential within a systems concept that has been humanized to produce teachers (persons) rather than teachers ("machines")! Certain items have

been identified for the teaching teacher to bear in mind in order that individual differences will be accommodated: The rate of learning; the scope and sequence and content of what is to be learned; the manner in which it is learned; internal and external motivation; and, the many interpersonal relationships that need to be mastered by the preparing teacher.

The uniqueness available to teacher training at Mount Mercy certainly, in part, derives from the fact that although it serves the public segment, it is able to furnish some inputs from its orientation as a Christian institution of higher learning. What are some of these inputs? There is first the committment to the belief that the example shown by the teaching teachers is the best and most enduring method of guiding the preparing teachers. There is the happy medium that Mount Mercy maintains between giving vocational training in education its needed specialization, while doing this in the overall context of a liberal education; by the latter is meant a humanistic approach to character development and acquisition of values; synthesis in self-understanding and in understanding the environment; sane meanings to life! The innovative teacher education program will enable the preparing teacher at Mount Mercy to encounter the needs of young people in a changing society while developing themselves as worthy individuals that future pupils may look to as models of thought and action in proper combination, based on that knowledge of identifying the permanent and the changeable and the gaining of the wisdom to distinguish. The Catholic college, less bound to rigid tradition and to control by governments, is in a somewhat freer position to innovate and explore new ways of instructing

the complete preparing teacher, so that the product will be both sensitive to self and society. Although the Wilkits of Weber State will be used as the starting modules of the program, the instructors will recognize that these modules will be open-ended so that the cognitive, affective, and psycho-motor domains can be approached in an integrated fashion--for this is the way "the scene is" in the real world of the elementary and secondary schools. In a person the intellect and will are not separated, therefore, teacher training should stress the integration of all experiences by the elimination of courses taught in a scattered fashion. The Authentic teacher is a synthesizer and a catalyst not the fountainhead of all knowledge; and so the Mount Mercy instructors and the instructors in the public and private schools of Cedar Rapids (involved in our program) relate subject matter to a wider continuum and treat the preparing teacher as a person worthy of respect. This example shown, we believe will lead the preparing teacher to a search for new meanings and new ways of looking at current matters. The teaching teachers and the preparing teachers both assist each other with common goals. This concern for the affective, the human, in a synthesis is perhaps the main ingredient in the humanistic component of the Authentic Teacher Education Program. All involved form a community of continuous learning. We believe this to be fundamental, and when combined with the products of research and the wonders of educational technology indeed furnish the essential training requirement of tomorrow's teachers today. We believe that this is the point of stress where not only is the Authentic Teacher Education Program at Mount Mercy somewhat different from other programs, but that

this is where the difference should be made. This is our "in medio stat virtus!

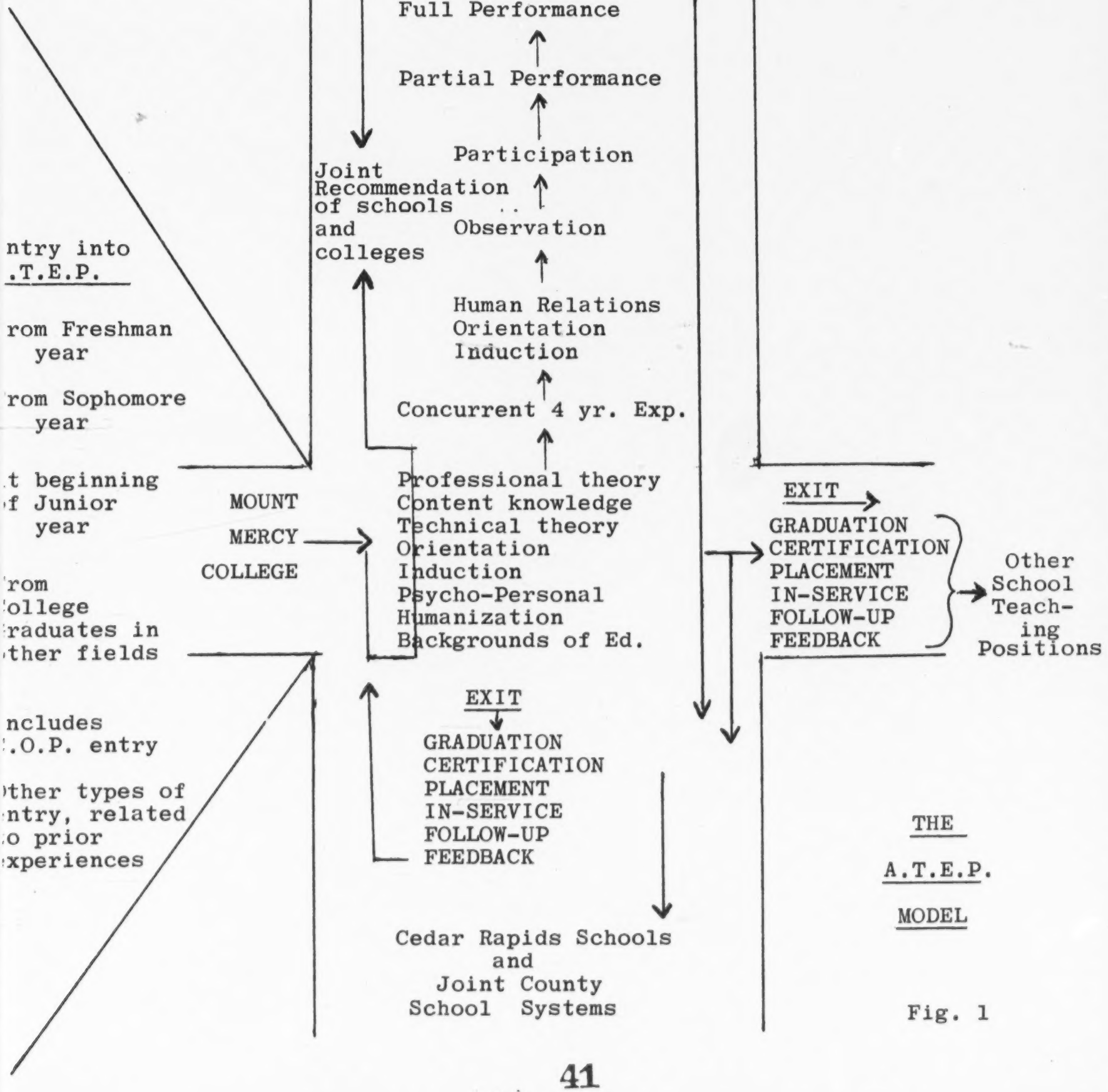
Why have we developed a Model? AACTE's studies furnish the answer to this question:

> There is value in the very process of program modeling, for it requires self-study. Self-study demands a continuing assessment of purpose, process, and product. Lacking a model, institutions may extend their resources and expertise in too many areas. A sense of consistency and continuity of effort and direction may be absent. A bad habit which is common when there is no model building is creeping curriculum inflation. This is characterized by a sustained addition of courses. Without a program model such occurrences frequently proceed unchecked.
>
> A program model, and the requisite explication of goals, can furnish a reference for making curricular and tangential decisions. Of course, a model should be flexible enough to permit, when conditions are right, the skewing from balanced efforts toward greater effort in special areas, for example, development of protocol materials.
>
> Modeling is characterized by a vigorous and permanent endeavor to collect and evaluate feedback data and adjust to feedback demands. If the model is distinguished by continuous assessment provisions, the program will continue to be dynamic and always in the state-of-becoming.[1]

The complete program at Mount Mercy has identified the objectives necessary in the program, the criteria by which the preparing teacher will be judged relative to the objectives, the resources needed (including space, materials, and personnel), the certification evaluation, and lastly it will integrate in-service training for its graduates as a continuing component; the final criteria for the latter component will be whether or not A.T.E.P. graduates brought about new and significant changes in their learning pupils and young people.

---

[1] Donald Haefele, Compiler, Systems and Modeling: Self-Renewal Approaches to Teacher Education. (Washington, D.C., AACTE, 1971), pp. 99-100.



THE

A.T.E.P.

MODEL

Fig. 1

The foregoing conceptual Model of A.T.E.P. tells the main points about our program. It is a practical and working model, also. More details will be given a little later in this presentation.

The program described by the Model seeks to prepare an innovative teacher who will consider his development as a person and exemplar as much as his professional competence. He must be flexible, committed, open to change and possess a command of the necessary knowledges and skills. This teacher guides children and young people, innovates, creates, and does research "on the job". He knows how to use mass media and technology to serve people and human interests and concerns. He knows the middle ground between the individual and the society; and he knows his own potential for influence. He relates learning to the pupil's life out-of-school and the student's future hopes, abilities and dreams; he helps the pupil strike a balance between realism and idealism. He knows the plural cultures in our society and how to meet these needs both for the individual and the school-serving community. He is a curriculum leader. If he decides to leave the program at any time, he is well-prepared for work as an educational para-professional. He knows about individual differences and how to relate them to actual school work. He is able to work in different types of school and classroom settings and he has developed his own teaching style. He is a community leader and worker.

This future master teacher has been prepared for his many professional assignments by a concurrent combination of real school

experiences (at an increasingly more responsible level) and college training based on discrete modules of learnings; these modules are performance-based, yet open-ended for humanism and creativity.

The present program of teacher education at Mount Mercy College is quite a bit different from the A.T.E.P. Model; yet it is like the programs to be found today in the vast majority of institutions that prepare teachers; from what has been related, it would seem that, in many significant respects this traditional program is found wanting, in today's world.

The 1970-72 Mount Mercy catalog describes the traditional program:

> EDUCATION (Ed)
>
> Within the framework of the general objectives of the college, the program of teacher education at Mount Mercy aims to form a liberally educated person who will become professionally competent as a teacher. In order to achieve its goal, Mount Mercy provides for each prospective teacher a program of general education, concentration in a major field of learning, and professional study in education.
>
> A student takes a sequence of education courses leading to professional certification by the State of Iowa with one of the following endorsements: elementary, secondary, elementary-secondary in art, or elementary-secondary in music. A student who intends to teach in a state other than Iowa is expected to plan his program in accordance with the requirements of the state where he will teach.
>
> In the spring term of the sophomore year, a student desiring admission to the teacher education program makes formal application to the teacher education committee; in the junior year, he applies for admission to student teaching. Each individual case is reviewed by the committee and acceptance is based on academic achievement (a cumulative grade-point average of at least 2.0) recommendation of the chairman of both the major and minor departments, good mental and physical health, and a personality acceptable for a teacher. [1]

---

[1]Mount Mercy College catalog, 1970-72. (Cedar Rapids, Iowa, Mount Mercy College Printing Office, 1970), p. 46.

> Admission to student teaching is not in itself a guarantee of recommendation for certification; the student must maintain the scholastic average required to be admitted to student teaching, perform successfully in his student teaching assignment, and manifest a consistently professional interest in teaching.
>
> Before college classes begin in the fall, a student planning to do student teaching in either the first or second term is expected to spend two weeks in an elementary or secondary school in order to experience the activities specifically connected with the opening weeks of school. As to the choice of school, a student is free to make a selection in his own locality. The advantages of student teaching in Cedar Rapids are several, including: modular, team teaching and traditional type situtations in school systems, and a joint county audio-visual center.
>
> A student who has already earned a degree follows the same procedure for admission to the teacher education program as an undergraduate. To be recommended for certification, he must complete at least six courses at Mount Mercy College.[1]

The A.T.E.P. Model for Mount Mercy College's Teacher Education Program was designed to fill the gap between "what is" (foregoing description of traditional program) and "what has to be." The Model is the recommendation to fill the gap. Iowa's Department of Public Instruction has given us an oral committment that the Department will give us license to certify teachers in this manner. The Model will state <u>who</u> does it? <u>How</u>? <u>What equipment and materials</u>? What <u>space</u>? What <u>personnel</u>? That, in addition to the other matters that have previously been covered in this study.

From the discussion about the A.T.E.P. Model when compared to the description of the present, traditional program we can see how the Model differs from the present program and how and why.

As previously stated, the teacher concept is the heart of this proposed program. The teacher will be a guide of the learning process and a resource person (both the College teachers and

---

[1] Ibid., p. 46

the public and private school teachers). The example of both these teacher types will be copied by the learning teacher who is to become the "product-teacher"; then in our elementary and secondary schools this new teacher will show forth the example learned by his conduct toward his own new pupils. This is the reason for this new partnership approach in education. It is finally designed to produce a pupil-parent-teacher-community total involvement in the education so desperately needed for today's and tomorrow's world.

A capsule summary of the new Model that will be operated cooperatively between Mount Mercy College and the public schools of the Cedar Rapids District and the Joint County District and the private schools in Cedar Rapids follows.

Students may enter the Authentic Teacher Education Program at Mount Mercy College at any level in their program: as incoming Freshmen; as transfer students; as college graduates returning for teacher training. In this program the emphasis is on the exit requirements, not the entrance requirements.

A description of the usual student program is as follows: Incoming freshmen who have entered Mount Mercy to train themselves for the teaching professions will immediately be admitted to the A.T.E.P. program upon registration, completion of the usual college entrance requirements (which includes the use of CLEP tests), the signing of an initial statement attesting to their desire to be trained as education professionals, and the completion of an initial one week orientation period to the A.T.E.P. Program.

If they persist in their original intentions they will then finalize their registration for certain sequenced blocks of modules in the program; a member of the education department will serve as the initial advisor of each of these students; later they may also have subject-matter advisors with the provision that every education student will also have a joint advisor who is a member of the education department; other advisors (not in the education department) who have been oriented to the A.T.E.P. program will later be asked to assist in the advisement program.

At the same time as they begin to progress through modules of instruction they will be assigned to a local school for at least six hours a week of observation experiences; in this situation they will be under the jurisdiction of the designated school and its personnel; when that school feels that the student is far enough along to begin some participation, he will then go through a four-year career ladder: teacher aide: senior aide; associate teacher; intern teacher. To begin the program, four model schools will be involved. The professional teachers in the public and private schools of Cedar Rapids and Linn County will have a tremendous input as to how future teachers are to be trained; in fact, they will help train them. The Iowa State Education Association will be a part of this picture, especially through all students' membership in the student ISEA. Frequent meetings will be held between the training teachers, both the college teachers and the LEA teachers. Some of the college classes will in fact be conducted in the elementary and secondary schools; videotape equipment can then be left in these schools.

Representatives of the Cedar Rapids School District, the Joint County School District and the Catholic School System will have equal representation on the Teacher Education Committee of Mount Mercy College; this will be the coordinating body of the Program. The representatives from the elementary and secondary schools will be appointed as Adjunct Professors with faculty rank at Mount Mercy College. The only pay involved will go to the cooperating teachers who will work in the culminating experience--student teaching. The preparing teachers will serve in the schools at no pay, but as part of the program. The enlarged Teacher Education Committee will periodically recommend to the College Recommending Official the preparing teachers who have completed the demonstrations of the required teaching abilities, knowledges, and performances. These persons may or may not receive their degree at the same time; lack of a degree may cause a different kind of certification but it will not keep the persons who have completed the initial stage of the program from beginning to teach, after they have secured teaching positions and certification; they will have proven their ability to teach.

By observation and seminars, the college teachers and the local school teachers will keep up an in-service program for the new teachers for a two-year period. During this period, it is anticipated that the Masters program will certainly get underway. Hopefully the Mount Mercy College Teacher Education Committee may be able to work with the applicable college or university in a way to both participate in the M.A. program and to insure the implementation of M.A. level activities for the candidate at least partially in the local elementary or secondary school setting.

The same type of follow-up and cooperation will be also maintained for Ed. D. or Ph. D. students in Education who had begun their professional life in the Authentic Teacher Education Program. Naturally the first phase of the Program is of more consequence now, but a complete Model should include all facets. In fact it is anticipated that the teacher trained in the A.T.E.P. Model will keep a continuing contact with the program during his entire professional life. Certainly the imputs of the graduates will be a constant source of evaluative changes, feedback, and modification in the Program, itself. From the above description, certainly this Model is able to effect changes of great magnitude in the structure of higher education, even at the graduate levels. This is a change in kind, as well as degree, in the entire educational process. The pupils of A.T.E.P. teachers will certainly be better-taught and the teachers will be able to "take hold" in almost any ongoing innovational changes e.g., I.G.E., P.L.A.N., etc.

While the students are working in local schools, they will also work as teams, leading up to Student Teaching Team Teaching.

Mount Mercy College's 4-1-4 curriculum and its course (and module) framework certainly aid in the implementation of this type of program.

Local school officials, and the D.P.I. have endorsed this program; the planners and participants believe that children, teachers, parents, schools, and the college will greatly benefit.

The preparing teachers will be exposed to the talents of many master teachers in the local schools' setting; they will aim their efforts at participating in an individual instruction program for pupils. They will be able to specialize in their areas of interest while gaining the basics at the same time.

Naturally all the ingredients of the A.T.E.P. Programs call for hard work on the part of all participants; anything worthwhile calls for hard work, and the rewards will be seen as more meaningful for these preparing teachers and the pupils they will later teach.

This capsule summary has omitted many things,and even this complete Model is never to be considered as "complete". It is only offered as a start in what many professional educators believe is the "way to head."

Major Themes and Objectives

Perhaps here it would be well for the reader to refer to Appendices A, B, and C. These will indicate the time-line followed to date, and also illustrate some of the guidelines that we propose to follow.

The ATEP Program is designed to produce a teacher who is able to work in present educational environments (which differ widely) and a teacher who is flexible enough to accommodate to change, in the future, that he or others will institutionalize in the future; the teacher must be able to work in the alternatives in education.

Major themes designated for accommodation in the ATEP Model are as follows:

- A linkage with school experiences so that the learning teacher can be a keen observer of specific pupil learning behaviors.
- In-service training on a life-long continuum.
- Scholarship in teaching and learning and mastery of at least one subject area.
- Use of a performance-based module curriculum
- Equal partnership between elementary and secondary teachers and college teachers.
- Knowledge about how children and youth grow and develop and how learning best takes place.
- Knowledge of teaching strategies to fit any given situation.
- Skill in interpersonal relationships.
- Knowledge of the Career Opportunities Program's Task Analysis in order to define the teacher and the authentic teaching act and example (including the learning plan and its implementation).
- Teaching articulation with professional societies, educational organizations, and educational technology that has been humanized.
- Planning and implementing curricular modules, daily, to fit individual preparing teachers and their learning needs in an open and pluralistic manner to accommodate individual differences.
- Recognizing and caring for a wide variety of talents and fields.
- Taking education out into the community and being responsive to community needs.
- Seeing some permanent values in life.

- Treating the preparing teacher first, as a person.
- Stressing guidance of the preparing teacher and permitting him to participate in the decision-making processes that affect him.

The above themes have led to our setting of goals and objectives in the ATEP program.

Instructional Goals

The goals of instruction in the ATEP model are designed to prepare teachers both as persons and educational professionals so that by the quality of their learning plans and implementation (their curriculum), and by their example, they will be able to influence their pupils to learn in all the areas of man: mental; social; emotional; physical; and spiritual.

The ability to construct linkages between the school, home, community, area, country, and the world--for educational purposes--is an essential goal of instruction for the preparing teacher.

Certainly the ability to form a teaching team using para-professionals is a goal of instruction; differentiated staffing, modular scheduling, team teaching, and open spaces are now on-going facts of life in many schools and the preparing teacher must know how to be a team member, where the above innovations are of a part of the teaching-learning process; in all of these the ability to plan is of the first priority.

In order to accommodate the humanistic goal, students will be permitted to design certain parts of their program of study in the modular, open-ended sequence.

Naturally one goal is teacher education in the setting of a broad liberal arts program; this assists the preparing

teacher to be aware of himself as a person, and as a future professional teacher. It also helps in making him aware that education and its schools are numbered among the primary social institutions of man.

Creation of positive attitudes, creativity, appreciations, and physical and emotional health sets the stage for the optimum learning of the preparing teacher.

As regards evaluation, it needs to be recognized that conferences, performances, and observations are perhaps the best criteria.

Finally, the instructional goals of the program have been designed to accommodate five essential parts: subject knowledge; professional knowledge; competency knowledge; guidance knowledge; and a knowledge of the real world of teaching.

Curriculum Design

The curriculum is designed for individual preparing teachers; the goals are identified as performance objectives; these will differ somewhat from student to student. The curriculum is based on reaching a satisfactory level of achievement in all the required areas; the reaching of this level will be determined by performance criteria; there will be no grades, no courses of study. All can enter the program but no one will be recommended for certification as a skilled, responsible, and professional teacher until, in fact, he can demonstrate that he is this kind of teacher. Training will take place both at college

and in elementary and secondary classrooms for four years; at first, observation will be conducted at pre-school, elementary, and secondary settings. This will assist the beginning preparing teacher to know what age groups he prefers to work with as a teacher.

In the statement of objectives, things that should be specified have been and things that should not be, have been kept open. Experiences at Mount Mercy and in the local school setting will begin with observation and proceed along a continuum toward participation and later, performance. Goals of specificity will not be allowed to produce "mechanical" preparing teachers. For example in evaluating a preparing teacher in the classroom performance, he will be scored more highly by his willingness to participate than by the frequency of responses of the pupils. Evaluation will be "performance-oriented" but certainly not limited to performance. In other words a preparing teacher may be evaluated as having performed in a satisfactory manner as evidenced by observation, participation in, or performance in. Task analysis of teacher competencies will be used but the classifications will be closely watched to avoid the mechanical and strictly behavioral aspects. The latest research has indicated that students have established priorities in the evaluation of their teachers, as follows (no. 1. being of first priority, and so on):

1. Knowledge of subject
2. Sense of humor
3. Tolerance
4. Mannerisms
5. Voice
6. Dress
7. Age
8. Sex
9. Strictness [1]

[1] Robert L. Buser, unpublished research study, Southern Illinois University, Carbondale, Illinois, 1972.

Task analysis as is being developed in our Career Opportunities Program at Mount Mercy will be an ongoing component of ATEP for identifying teaching competencies. These competencies will be worked into the modules that we will begin with (Weber State's).

The following is a list of competencies researched by a group of Cedar Rapids Public School teachers; it is not intended to be exhaustive:

1. Ability to formulate performance objectives and suggest appropriate learning tasks.
2. Ability to accept and implement needed changes.
3. Demonstrate the skill of utilization of present curriculum as a vehicle to formulate a life skills curriculum.
4. Be able to guide, direct and facilitate the learning of the individual learner, including extending learning beyond the "egg-crate" building to the community and environment.
5. Create a congenial atmosphere in which exists self-imposed responsibility, self-imposed discipline and student decision making.
6. Counsel with parents and students in a way that leads them to the realization that they are the decision makers of the learning objectives to be pursued.
7. Develop or select and cause to be maintained a student evaluation and record-keeping system that would enable, within one minute, information to be retrieved concerning what any given student had accomplished in the way of learning objectives, what students were currently working on, etc.
8. Be able to assess the intellectual, social, physical, emotional and creative development of students.
9. Be able to accept every student as a worthwhile human being who has a right to develop at his own rate and in his own style.
10. Demonstrate the skill of communicating with peers, parents, and students.
11. Be able to effectively work with professional and non-professionals for the improvement of education.
12. Be able to structure lessons concerning personal values including the use and misuse of dependency on tobacco, alcohol, drugs and other chemicals.[1]

---

[1] Harold Jones, et al, Cedar Rapids Public School District, Cedar Rapids, Iowa, 1972.

The question often arises as to what constitutes the "performance-based" aspect of the curriculum, as there have been some areas of disagreement here. Now (1972) it seems, from the literature, that there is general agreement that a program is performance-based if:

1. Competencies (knowledge, skills, behaviors) to be demonstrated by the person completing the program are:
   a. derived from explicit conceptions of professional roles;
   b. stated so as to make possible assessment of a student's behavior in relation to specific competencies;
   c. made public in advance.
2. Criteria for assessing competencies:
   a. are based upon and are in harmony with specified competencies;
   b. make explicit expected levels of mastery under specified conditions;
   c. are made public in advance.
3. Assessment of the student's competence:
   a. uses his performance as the primary source of evidence;
   b. takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior;
   c. strives for objectivity.
4. The student's rate of progress through the program is determined by demonstrated competence rather than by time or course completion.
5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.[1]

The above are certainly the essential and generic components of performance-based education. The Wilkits of Weber State College which the ATEP Model uses as its starting point will fulfill the above criteria.

---

[1] AACTE Bulletin, (Washington, D.C., December, 1971).

Roger Robinson (1972) has made some further comments that explain, better than the writer, other aspects that will be included in our ATEP program:

> These are generic, essential elements. Only professional educational programs that include all of them fall within the definition of performance-based education.
>
> Related elements
>
> There is another, longer list of elements that may and often do accompany performance-based programs. They should be thought of either as implied or as related and desirable. The categorization of "implied" or Related-desirable" is empirically rather than theoretically based and represents observer perceptions of performance-based education in action.
>
> - Instruction is individualized and personalized. Because time is a variable not a constant, and because students may enter with widely different backgrounds and purposes, instruction is likely to be highly person- and situation specific; but these are only two in a web of interrelated contributing factors.
>
> - The learning experience of the individual is guided by feedback. Feedback consists of having a person see, hear, or feel how others react to his performance, or it can be self-evaluative, as when a student observes a videotape of his own performance or reads about what is wrong with his choice of responses. Feedback may be designed to minimize assessment and evaluation by others. It permits both faculty and students to initiate and become involved in the program. Thus this element is closely related to the individualization feature of performance-based education. The feedback loop enables the faculty and students to modify the program to meet the needs of the individual. Among its implications are these: there is no one right way to achieve any particular performance objective, and real choices among means are made available to the individual.
>
> Systemic program
>
> - The program as a whole is systemic, as the essential elements require. A system is a collection of interrelated and interacting components which work in an integrated fashion to attain pre-determined purposes. Purpose determines the nature of the process used, and the process implies what components will make up the system. The application of such a systematic strategy to any human process is called the systems approach. Most systems are product-oriented; they operate in order to produce or accomplish something. How accurately these products reflect the systems' purpose is the critical measure by which we judge the systems' operation.[1]

[1] Roger Robinson, Unpublished Manuscript, (Carbondale, Illinois. Southern Illinois University, 1972).

- The emphasis is on exit, not on entrance, requirements. The tendency of traditional has been to establish certain requirements which must be met before the candidate is admitted to a program, after which only passing course grades are required, plus successful completion of an experience or internship.

- Instruction is modularization. A modeule is a set of learning activities (with objectives, prerequisites, pre-assessment, instructional activities, post-assessment, and remediation) intended to facilitate the student's acquisition and demonstration of a particular competency. Modularization increases possibilities for self-pacing, individualization, personalization, independent study, and alternative means of instruction. It also permits accurate targeting on the development of specific competencies.

- The student is held accountable for performance, completing the preparation program when, and only when, he demonstrates the competencies that have been identified as requisite for a particular professional role.

- The program is field-centered. Because of the heavy emphasis upon performance in the occupational role and assessment in real settings, much of performance-based preparation is conducted in the field.

- There is a broad base for decision-making (including such groups as college faculty, students, and field personnel). Some of the same factors that produce field-centered performance-based education programs also contribute to a generally multi-institutional pattern of organization and method of decision-making.

Design flexibility

- Both the teachers and the students are designers of the instructional system. It is important that the student gain practice in guiding his own instruction and in helping to set, at least in part, his own educational goals. This means that the system must not be a completely closed affair in which the student simply goes through the motions as required by those who designed it. There must be sufficient alternatives and options to provide challenge and opportunity for adaptation by the learner during the learning process. There must be opportunity for him to discover how his particular constellation of habits and skills, both cognitive and interpersonal, can be made maximally effective in his or her profession.

- Because performance-based education is systemic and because it depends upon feedback for the correction of error and for the improvement of efficiency, it is likely to have a research component; it is open and regenerative.

- Preparation for a professional role is viewed as continuing throughout the career of the professional rather than as only pre-service in character.[1]

---

[1] Ibid.

It was discussed earlier that Mount Mercy would use the Wilkits of Weber State College, Ogden, Utah, as a starting point for the ATEP program; these modules will take the place of the present courses in education and will be left open-ended both as to content, process, and evaluations at the discretion of the teaching teacher. The way the change is to be made, is as follows:

TEACHER EDUCATION REQUIREMENTS

ELEMENTARY EDUCATION

Modules	Replacing:
Introductory Field Experience	
WILKIT: Orientation (W-3)	
Fundamental Skills for Teachers	
WILKIT: Self-Concept (W-12)	Ed 102-Foundations of Education Ed 151-Educational Psychology
Basic Teaching Skills	
W-57, Tutoring Techniques and Student Records	Ed 102-Foundations of Education
W-5, Growth and Development	Ed 151-Educational Psychology
W-7, Principles of Reinforcement	Ed 151- " "
W-26, Reading Study Techniques	Ed 312-Teaching of Reading
W-39, The Language of Music	Ed 268-Music for Elementary Teachers
W-35, Handwriting	Ed 257-Elementary Curriculum
W-37, Listening	Ed 257-Elementary Curriculum
W-23 Art	Ed 165-Art for Elementary Teachers
W-60, Media Production - Preservation	Ed 245-Media
W-70, Media Equipment Operation - Motion Picture Projectors	Ed 245-Media
W-72, Media Equipment Operation - Slide and Filmstrip Projectors	Ed 245-Media

Modules	Replacing:
W-73, Media Equipment Operation - Overhead Projectors	Ed 245-Media
W-75, Media Equipment Operation - Sound Recording and Production	Ed 245-Media

Elementary School Curriculum I

WILKITS:	
W-27, Reading Readiness	Ed 312-Teaching of Reading
W-28, Nature and Instructional Implications of Reading	Ed 312- " " "
W-34, Reading Comprehension	Ed 312- " " "
W-30, Phonic Analysis Skills	Ed 312- " " "
W-31, Structural Analysis Skills	Ed 312- " " "
W-29, Basal Approach to Teaching Reading	Ed 312- " " "
W-33, Dictionary Skills	Ed 257-Elementary Curriculum
W-36, Spelling	Ed 257- " "
W-32, Written Communication	Ed 257- " "
W-38, Oral Communication	Ed 257- " "

Elementary School Curriculum II

WILKITS:	
W-6, Elementary School Mathematics I	Ma 13-Modern Elementary School Mathematics
W-9, Elementary School Mathematics II	Ma 13-Modern Elementary School Mathematics
W-42, Inquiry in Elementary Science	Ed 219-Science in the Elementary School
W-43, Organizing and Planning for Teaching Elementary Science	Ed 219-Science in the Elementary School
W-50, Social Studies in the Elementary Schools	Ed 257-Elementary Curriculum
W-51, Social Studies Resources	Ed 257-Elementary Curriculum
W-52, Social Studies for the Culturally Disadvantaged	
W-53, Social Studies Skills Development	Ed 257-Elementary Curriculum
W-54, Elementary Social Studies Instruction	Ed 257- " "

Modules	Replacing:
W-40, Music for Children	Ed 268-Music for Elementary Teachers
W-41, Chording and Harmony	Ed 268-Music for Elementary Teachers

Professional Skills of Teaching

WILKITS:	
W-2, Lesson and Unit Planning	Ed 257-Elementary Curriculum
W-1, The Four C's of Teaching	Ed 151-Education Psychology
W-22, Purposes and Methods of Classroom Evaluation	Ed 151- " "
W-4, Classroom Management and Discipline	Ed 151- " "
W-20, Instructional Resources - Evaluation and Use of Instructional Media	Ed 245-Media
W-10, Teaching and Learning in the Three Domains	Ed 151-Educational Psychology

Teaching Practicum in Elementary Education
Student Teaching

WILKITS:	
W-17, Professional Relationships	Ed 353-Student Teaching
W-18, Professional Rights	Ed 353-Student Teaching
W-13, Motivation and Learning	Ed 151-Educational Psychology
W-21, Classroom Group Meetings	Ed 353-Student Teaching

Synthesis of the Teaching Program

WILKITS:	
W-16, Background of American Educational Practice	Ed 102-Foundations of Education
W-8, Transfer of Learning	Ed 151-Educational Psychology
W-19, Professional Responsibilities	Ed 102-Foundations of Education
Leadership or Service Practicum	Ed 353-Student Teaching
Prescribed Remediation of optional WILKITS	

Courses to be modularized by locally constructed modules:

Ed 204-Health and Physical Education Methods
Spd 265-Creative Dramatics
Ed 302-Children's Literature
Ed 217-Principles of Geography

In addition to the Education courses, the Mount Mercy College catalog lists several subject area courses required for both majors and minors in Elementary Education. At the present time these courses are not in the Education Department, and it is presumed that for the present they will continue to be taught as courses rather than modules.

Following the completion of the modules in education, the subject matter courses, the four years of laboratory experiences, the ATEP Model plans for the initial phase to culminate in Team Student Teaching.

Throughout the four years the teachers at Mount Mercy and the supervising teachers in the designated elementary and secondary schools will be totally involved in joint planning; it is anticipated that some modules will be completed "on-site" while most of them will be completed at the college. The entire Teacher Education Program will be under joint supervision by the appointed members of the school districts and the college members; both groups will together form the Teacher Education Committee of Mount Mercy College.

Secondary Education

Secondary Education is offered as a minor at Mount Mercy College. At present the subject-area major will be taught under the course system, while the education courses will follow the module system as follows:

TEACHER EDUCATION REQUIREMENTS

SECONDARY EDUCATION

Modules	Replacing:
Introductory Field Experience	
WILKITS: Orientation (W-3)	
Fundamental Skills for Teachers	
WILKITS: Self-Concept (W-12)	Ed 151-Educational Psychology
Theoretical Foundations of Secondary Education	
WILKITS:	
Tutorial Techniques and Student Records (W-57)	Ed 225-Principles of Secondary Education
Growth and Development through Adolescence (W-15)	Ps 124-Human Growth and Development
Principles of Reinforcement (W-7)	Ed 151-Educational Psychology
School Health (W-14)	Ed 225-Principles of Secondary Education
Evaluating Teacher Behavior (W-55)	Ed 225-Principles of Secondary Education
Instructional Skills for Secondary Teachers	
WILKITS:	
The Four C's of Teaching (W-1)	Ed 102-Foundations of Education
Lesson and Unit Planning (W-2)	Ed 102- " " "
Classroom Strategies (W-80 through 85, select two)	Ed 225- Principles of Secondary Education
Purposes and Methods of Classroom Evaluation (W-22)	Ed 151-Educational Psychology
Instructional Resources: Evaluation and Use of Instructional Media (W-20)	Ed 245-Media
Media Production (W-60)	Ed 245-Media
Media Equipment Operation (W-70)	Ed 245-Media

Modules	Replacing:
Teaching Practicum in Secondary Education Student Teaching	
WILKITS:	
Motivation and Learning (W-13)	Ed 151-Educational Psychology
Classroom Group Meetings (W-21)	Ed 225-Principles of Secondary Education
Classroom Management (W-4)	Ed 225-Principles of Secondary Education
Teaching and Learning in the Three Domains (W-10)	Ed 151-Educational Psychology
Analysis of the Teaching Act	
Synthesis seminar	
WILKITS:	
Professional Rights (W-18)	Ed 102-Foundations of Education
Professional Relationships (W-17)	Ed 102- " " "
Professional Responsibilities (W-19)	Ed 102- " " "
Backgrounds of Educational Practice (W-16)	Ed 102- " " "
Transfer of Learning (W-8)	Ed 151-Educational Psychology
Leadership or Service Practicum	Ed 355-Observation and Student Teaching in the Secondary School
Prescribed Remediation or optional WILKITS	

The courses under Ed 321-Special Methods for Secondary School Teachers will continue, for the present, to be taught in the academic departments.

It is anticipated that after the first trial implementation of the full ATEP program (1973-74), the Chairman of the Department of Elementary Education may make some shifts (ref.the Wilkit Elementary Breakdown, Appendix D) and also be adding other locally-produced modules to accommodate the program in Cedar Rapids; the Weber State modules will be modified even from the beginning, however, to accommodate individual differences and local situations, at the options of the instructors concerned; the humanization of the program from its inception will be assured!

The Master List of Weber State Wilkits (modules of instruction) is given in Appendix E.

The Wilkits will be available through the William C. Brown Publishing Company of Dubuque, Iowa. This information is contained in Appendix F.

Appendices G and H describe the program in use at Weber State College.

Appendices I through K give a further explanation of performance-based teacher education.

Appendix L gives the Journals currently available in McAuley Library and in the Curriculum Library, in Education.

Appendix M shows a model for the design of instruction that can be used in locally-constructed modules.

Included in this text is a demonstration sample of a Weber State Welkit:

(Illustrated below is the format used for the front page of each WILKIT*)

INDIVIDUALIZED PERFORMANCE-BASED

TEACHER EDUCATION PROGRAM

(DATE)

WILKIT: DEMONSTRATION WILKIT

APPROXIMATE TIME TO COMPLETE: (Hours)

MATERIALS:

To Purchase:

Text:
Equipment:

Enclosures (included in WILKIT packet):

Library Books: (Where located)

EXPERIENCES TO BE SCHEDULED IN ADVANCE:

(Listed in this section are experiences for which arrangements must be made well in advance—one to two weeks). For example:

1. Teaching or observing in a public school classroom
2. Faculty conferences
3. Peer teaching or peer group discussions
4. Seminars
5. Microteaching

All scheduled experiences in the WILKIT (peer groups, seminars, faculty conferences, examinations) are arranged through Operations unless otherwise indicated.

This WILKIT May Not Be Reproduced Without Written Permission From The

SCHOOL OF EDUCATION
WEBER STATE COLLEGE

*Weber Individualized Learning Kit (WILKIT Number)

WILKIT: (Sample Titles:) Methods and Purposes of Classroom Evaluation
Motivation and Learning
Lesson and Unit Planning

INTRODUCTION: (Sample from WILKIT on Methods and Purposes of Classroom Evaluation)

It is the responsibility of each classroom teacher to assess the capabilities, interests, and progress of each pupil enrolled in his or her classes. That responsibility makes it mandatory that all classroom teachers thoroughly understand the purposes of evaluation and the techniques which may be utilized to effectively fulfill each of those purposes. Otherwise, the challenge presented by the responsibility to evaluate may be unsuccessfully met, if not ignored completely. It is also necessary for teachers to evaluate the effectiveness of the curriculum and the strategies which they employ to actuate that curriculum. Without a comprehensive plan for the evaluation of classroom activities it is tremendously difficult, if not impossible, for any teacher to effectively function as a director of learning experiences.

CONTENT: (Samples from WILKITS on Motivation and Learning and Lesson and Unit Planning)

1. The nature of motivation.
2. How motivation develops.
3. Factors affecting motivation in the learning process.
4. Using motivational strategies in the classroom.

1. Why Plan?
2. The Elements of Lesson and Unit Plans.
3. Developing a Plan.
4. Use of a Plan.
5. Different Approaches for Units

PRE-ASSESSMENT:

Some WILKITS have no Pre-Assessment. Some provide for a test which, if passed, offers a student the opportunity to move directly on to the Proficiency Assessment. Another type of Pre-Assessment - taken from the WILKIT on Social Studies in the Elementary School - is as follows:

There is a Pre-Assessment for this WILKIT. You may take the test at Operations. When you have completed the test, arrange through Operations to confer with your faculty advisor (Scheduled Activity 50-1) to select those Learning Experiences in the WILKIT which are appropriate to you. Proficiency in specific areas will exempt you from certain Learning Experiences. If you achieve 100 percent on the test, you will be exempted from the remainder of the kit.

BEHAVIORAL OBJECTIVES:

The following are sample Behavioral Objectives extracted from various WILKITS. Examples were selected which illustrate typical statements of terminal behavior. The numbers shown in brackets indicate the WILKIT from which each Objective was taken.

Samples:

Upon completion of the materials and Learning Experiences in this WILKIT, you will be able to:

1. Demonstrate your comprehension of structural analysis skills by scoring eighty or more points on the Structural Analysis Test. [W-31]

2. Demonstrate comprehension of the difference between auditory development and auditory discrimination by:

   a. Defining auditory development and auditory discrimination.

   b. Describing two principles you as a teacher may follow with a student who seems to have an auditory development problem.

c. Describing at least five procedures you as a teacher may use to improve a student's auditory discrimination. [W-27]

3. Apply the principles of indirect teaching strategies by satisfactorily teaching a lesson of your choice to a group of public school pupils using an indirect teaching strategy as measured by a minimum of 50 percent "yes" responses in the indirect response group on the critique sheet as marked by the cooperating teacher. [W-54]

4. a. Display comprehension of the four functions which aid us in the classification and understanding of the factors which account for motivation, as measured by a teacher-designed examination with a proficiency level of 80 percent.

b. Synthesize a plan for using the four functions in performing the teacher-functions relating to the motivation of pupils in a unit you plan to teach. This objective will not be evaluated in the same manner as the other objectives since its main purpose will be to provide experience in creating such a plan. The plan will receive a general appraisal by the instructor in terms of its creativity and probable applicability. [W-13]

5. Apply the principles of projection by operating a 16 mm motion picture projector according to the criteria listed by Davidson, Audiovisual Machines. [W-70]

6. Respond to the group interaction of a classroom meeting in which you will assume the leader role, as measured by a 75 percent agreement with the faculty advisor on a teacher-designed Summary of Group Interaction. [W-21]

LEARNING EXPERIENCES:

The Learning Experiences in each WILKIT are designed to assist the student in achieving the Behavioral Objectives. They vary according to the content of each WILKIT as well as the Behavioral Objectives to which they relate. The following are sample Learning Experiences from various WILKITS. They were selected to illustrate the variety of activities

utilized in different WILKITS and do not necessarily relate to the Behavioral Objectives listed in this sample WILKIT.

Samples

1. Read the monograph on lesson and unit planning (Enclosure 2). Pay special attention to the lesson plan and unit outline in English which are included in the body of the paper, because the model lesson you will see is drawn from these plans. (This experience relates to all Behavioral Objectives listed previously.) [W-2]

2. View, in the Dial Access Center, the videotape V-101 of a model lesson illustrating the importance of the conceptual approach to planning and instruction. (See Enclosure 9 for instructions on the use of the dial access equipment.) Complete the review guide for this model lesson after you view it (Enclosure 3). If you cannot answer the questions, view the tape again. (Behavioral Objective 1) [W-1]

3. Read Durrell's Improving Reading Instruction, Chapter 13, pages 285-307. This is an excellent chapter describing study guides and explaining how reading comprehension can be taught. (Behavioral Objectives 5 and 6) [W-34]

4. At this point I can hear you saying to yourself, "I want my students to learn something that will have application, but what are concepts and principles?" To answer this question please turn to De Cecco, The Psychology of Learning and Instruction, pages 387-401 for a good treatment of concepts and principles and their attributes; also, I believe you will find that Woodruff, Basic Concepts of Teaching, Chapter 5, pages 63-88 presents a clear and informative discussion of the nature of concepts and how they are learned in experience. Refer to Objective 4. [W-10]

5. Participate in a two hour seminar discussion which will treat the topic "Purposes and Methods of Classroom Evaluation". This seminar (Scheduled Activity 22-3) will not meet until a minimum of ten students have registered. No more than fifteen students will be included in the seminar. (All Behavioral Objectives) [W-22]

6. Practice preparing and presenting a lesson which is based on a single concept and which has concrete support by teaching a five to ten minute lesson segment to a group of three or more of your peers who are at a similar point in their studies. Take turns critiquing each other's lesson. [illegible] should obtain a completed copy of Sections A and B of the crit[illegible]e form provided (Enclosure 5) from each participant. You can arrange for students to participate in this experience through Operations. (Behavioral Objectives 1 and 2) [W-1]

7. Practice until you can demonstrate your proficiency in the use of all of the Four C's by preparing and presenting a seven minute lesson in the microteaching clinic. You should plan to incorporate all of the Four C's in this lesson. You should complete a copy of the Evaluation of Teaching Efficiency Form (Enclosure 8) for this microteaching segment. (All Behavioral Objectives) [W-1]

8. Observe a reading group in each of two public school classrooms. Note how comprehension is being emphasized. Use the observation forms (Enclosure 2). These observations may be in grade levels of your choice. (Behavioral Objectives 1 through 7) [W-34]

9. View the films listed below:

"Education in America: 17th and 18th Centuries"
"Education in America: the 19th Century"
"Education in America: 20th Century Developments"

Check at Operations for the viewing schedule and room. (Scheduled Activity 16-1)

A topic outline of each film is in the WILKIT as Enclosure 4. The topic outline is intended to assist you in viewing the film, in thinking about it, in discussing it, and in relating what you see on the film to your reading assignments. [W-16]

10. Your study of Reese may be enhanced if you recognize that this type of material, while fairly straightforward and uncomplicated, sometimes gives students a little trouble initially. My guess is that this is due to the fact that there are two levels of abstraction. It is not too difficult to learn a name of a concrete object, but when you learn a concept or abstraction and then have to identify it with a new name, the difficulty is much greater.

It is a great help to most people if they verbalize or state the definition and concept in their own words. An easy way to do this is to work in teams and have discussion sessions. It also helps to explain to a friend or family member, or at least to yourself.

Most have had the experience where they felt they knew the material, but when they had to explain it or take a test on it they found out they didn't really have complete comprehension of it.

Review of new terms only takes a few minutes each day and will easily be the most productive time you will spend studying. It will insure long term retention.

The Table of Contents in Reese's book provides an excellent study guide. If you frequently turn to it and test your memory of each topic you have covered, it should prove an effective study technique. [W-7]

11. Following your reading assignments, you should schedule a conference with the faculty advisor (Scheduled Activity 65-2) to discuss and receive approval of the projects you plan to create. You are to create a bulletin board display and at least three other display or manipulative devices for use in your subject area or grade level. (Behavioral Objectives 1a and 1b) [W-65]

12. Participate in an observation-participation experience as a member of a team. Make arrangements at Operations for this experience (Scheduled Activity 84-1). You should observe the first day and participate as a team member the second and third days. You should spend a minimum of 6 to 8 hours at the school. You should (1) participate in a planning session, (2) observe a large group (if it is planned during the days that you are in school), (3) participate in a small group, and (4) work with an individual student. Study the Team Teaching Check List (Enclosure 3) to see what is expected of you during this experience. [W-84]

SELF-EVALUATION:

Methods of self-evaluation vary also.

Samples:

1. After you have completed the Learning Experiences, it would be a good idea to test yourself. Use the Self-Test (Enclosure 4) which is a sampling of the content of the WILKIT. This will give you an opportunity to spot any weaknesses you may have in any of the areas covered in this WILKIT. If you determine that you have weaknesses, you should repeat the related Learning Experiences and, if necessary, consult with the faculty advisor. If you get all but one or two questions correct, proceed with the Proficiency Assessment.

2. Using the Self-Evaluation Check List (Enclosure 14), review the competencies which you have developed during the foregoing Learning Experiences. If you feel that you have not mastered the knowledge and skills required by the Behavioral Objectives, confer with your faculty advisor for the purpose of formulating additional learning activities. If you and your advisor concur that you have

met the requirements of the Behavioral Objectives satisfactorily, you are now ready for the final examination. [W-22]

3. Use the critique sheets from your peer teaching and microteaching experiences to write an evaluation of your performance as a teacher. You should give special attention in writing your evaluation to any particular strengths or weaknesses you have noted in your teaching. You should also call attention to any evidence of improvement you have been able to observe. Try to be concise, but complete, in your evaluation. Writing the evaluation should help you to see any areas in which you need review or additional practice before the Proficiency Assessment experience. Turn in your completed evaluation at the time you arrange for the Proficiency Assessment interview. [W-1]

PROFICIENCY ASSESSMENT:

Each WILKIT may provide for one or more of the following examples:

Samples:

1. Take a written examination at Operations. This objective-type examination will consist of 25 test items related to Behavioral Objective 1, ten items for Objective 2, and 25 items for Objective 3. Eighty percent accuracy is the minimum standard for each of the three objectives. [W-16]

2. Arrange a conference with the faculty advisor. Bring to this conference the written assignments you completed for Learning Experiences 2, 5, and 8. Be prepared to discuss these assignments, the peer teaching, the observation-participation experience and the final written examination.

3. Design a comprehensive plan of classroom evaluation for a unit of instruction which you have previously designed. Meet with your faculty advisor to establish a time schedule for the completion of this project. It is necessary for you to complete this activity to the satisfaction of your faculty advisor. [W-22]

4. Arrange through Operations for a final evaluation interview with a faculty advisor. The interview will be based on your demonstrated performance in the fifteen minute microteaching segment, evaluation of earlier performances and any other performance elements related to the Behavioral Objectives which the faculty advisor might require. [W-1]

This then, is the curriculum design that we will follow in the ATEP Model. The evaluation of both college teachers and local school teachers will follow the broad outlines of the modules, but the teachers are to have complete freedom of evaluation.

The module of instruction has several aspects:

- objectives
- prerequisites
- pre-assessment
- instructional activities
- post-assessment
- remediation
- feedback to all components for necessary changes

Research indicates that performance-based modular teacher education produces better teachers than the traditional method. For this reason we have constructed the ATEP Model for Mount Mercy College's Education Department.

Overall Program Organization and Implementation

Admission to the A.T.E.P. program has been previously described. While no student will fail, none will be admitted to certification unless they successfully complete the program (at about a "B" level in a traditional grading system). Students will need intellectual ability and a strong desire to make teaching their life's work. Certainly no one will normally be able to complete the program unless they have physical and mental health.

The concurrent experiences in the college program and in the local school setting will provide, over a four-year period, academic competence and the basic skills required for a beginning teacher; the inputs of the program (where teachers have gone through a similar program) seem to indicate that the level of beginning teaching competence will be higher and the professionalism greater than that from the graduate of a traditional program.

The shared responsibility for the program will give the student the best learnings possible from the interactions and interrelationship of college teachers and elementary and secondary teachers. Finally the total profession represented on the Teacher Education Committee will have a voice on entry into the profession.

The A.T.E.P. program is divided into five parts which draw upon knowledges and experiences gained from completing the modules and from working in the schools:

Academic competence

Educational professionalism

Guidance

Laboratory experiences

Teacher abilities

The structure of the program includes the in-service component, previously described. Briefly stated, the preparing teacher who becomes the beginning teacher maintains a continuing educational contact with the ATEP Program.

The model accommodates the context, input, process and product of an Authentic Teacher Education Program.

Process Design

At Mount Mercy College to effect the total ATEP program with a minimum of dislocation some tentative suggestions will be made. The reason for the location changes described below is to put in one congruent location all the college facets of the program.

The entire basement floor of McAuley Library is needed to implement this program. An enlarged Media Center, The Curriculum Library, the offices of the instructors in the education department, the scheduling center for the modular instruction, the seminar rooms for small group instruction and interactions and one large group meeting room--all these would be together and this is required for the implementation of the total program.

The personnel of the department can handle the instructional tasks with the addition of one para-professional to be in charge of the scheduling center. The student teaching load will necessitate the addition of another instructor in that department in the 1972-72 academic year (over fifty elementary education majors to be supervised in student teaching). The Career Opportunities Program is totally funding another person for the school year 1972-73; this person will be of some assistance in working with students engaged in pre-student teaching laboratory experiences. The director of the Media Center has resigned from that position and the replacement person will be able to assist in the A.T.E.P. Program. To accommodate the real needs of the Education Department, it is sincerely hoped that the Director of the Media Center will be hired under a joint appointment between the Library and the Education Department. The Media Department is too closely connected to the training of teachers for this not to be the case.

The present and incoming media equipment as listed in Appendic N are hardly sufficient to accommodate both the needs of the College and the needs of the four model school training sites where bulkier equipment will have to be housed. The description of the ATEP model is for the use of the Iowa State Department of Public Instruction, for providing certification under the program. At a later date this study will be used in an effort to obtain a federal grant to build the Learning Center that is really needed for this program to function at an optimum level of performance; it is difficult to train teachers from patchwork. We will do the best, however, with what we have; the implementation of the program is the most important item; teachers for the future can no longer

be trained in traditional methods for teachers so-trained are not even prepared to cope with today's problems in the elementary and secondary schools--without even considering the future!

Institutional Relationships

The relationship between the college and the schools of the two local districts and the private schools of Cedar Rapids has been sufficiently covered. Sufficient to say, that the ATEP Model will provide for a joint effort between the College and the LEAs.

The districts will designate the model schools to be used for pre-student teaching laboratory experiences.

We intend, moreover, that local education organizations shall have a voice in how teacher training takes place.

Certainly we will look to a continuing relationship with the State Department of Public Instruction for their guidance and suggestions.

The model schools designated will be known as Portal Schools, that is, they will provide a place where all forces can be joined to give the student a real entry-point into the education profession.

The results of the research of the regional laboratories funded by the Office of Education will be put into meaningful practice. Our program will provide feedback to ERIC and we will draw from ERIC. The ATEP program is not a finished product but a better way of becoming--that is, a better way, to date, for the training of teachers who will be required to be educational professionals.

Finally, there must be a new linkage with the liberal arts faculty of Mount Mercy College in order to make foundational courses more relevant for the needs of today's world.

Innovative Features

There will be accommodated in the ATEP program all the "traditional" innovations:

- Interdisciplinary cooperation
- The use of ERIC
- The use of minicourses
- The use of microteaching
- The use of task analysis, derived from the COP program
- The training of teachers in how to teach the disadvantaged and the deprived, as well as the culturally-different
- The use of community resources and community resource personnel
- The acceptance of accountability for our teacher-products
- Individual instruction
- Students will share in formulating their curriculum (to help them learn decision-making)
- Simulation, gaming, and empathy training
- The concept of lifetime learning will be accommodated.
- International education will be seen as part of the relevant knowledge required for teachers, today.
- Valid evaluation will be an integral part
- Team student teaching will be used.
- The writing of behavior objectives will be taught
- Videotaping and audiotaping
- Clinical professors will be a part of the College Staff
- Portal schools
- Continuous progress concept
- Early childhood education will be included in the program
- Parents, citizens, and taxpayers will be consultants to the Teacher Education Committee
- The Social Psychology of Education will be taught

- Preparing teachers will be instructed in how to work with para-professionals
- Multi-sensory media will be used
- Systems analysis
- In-service continuance of education
- Teachers will learn how to use guidance services and social services for their pupils
- On-site coordinated, career-ladder training for four years in Model Portal Schools
- Local production of Protocol materials
- Staff orientation by pre-service and in-service training.

Perhaps there are some innovations that are not yet fully implemented in similar programs. We would now like to mention some of these.

There will be alternate means of reaching goals and objectives--the content, experiences, and competencies in the cognitive, affective and psycho-motor domains; the modules having been left open-ended are subject to individual changes by individual teachers for the benefit of individual students; if it is recognized that some students are not able to become teachers in this manner, and if they fit other requirements, then some traditional methods may be mixed into the program, as would be required; items that are presently approved by the Iowa State Department of Public Instruction. The aim is to turn out authentic teachers and it is seen that for a <u>very few,</u> the mixture may have to be used; here, the most rigid evaluations will be employed. There is <u>no</u> <u>student</u> that will be unable to be accommodated, due to the freedom built into the program, and so all elements of humanism in education will be accounted for.

We feel that there exists the question: What kind of teaching works best? From earlier references to curriculum history that traced some 25,000,000 years of the function of education, and later the growth of this function into a primary institution, we feel that learning by doing and being taught by the example of the teachers--that these are two concepts validated by curriculum history; and these concepts are primary in the ATEP Model; it may prove to be "old wine in new bottles" but perhaps for the first time the wine will be drunk and not remain in the bottles, of whatever age!

Some have raised the questions that the evaluation techniques essential to the program can be developed rapidly enough to be better than past "letter grades". Certainly we feel that the direct observation of the participation and performances of the learning teacher, by the preparing teachers (both from the college and portal schools), over a four-year period is a much better evaluation of what the future performance of any given person would be, than the use of sterile letter grades. In the hands of master teachers, we have no fear whatsoever of the evaluation process. If lifetimes of teaching and learning do not furnish some valid criteria, then we would certainly not expect to get evaluation from mechanized methods that de-humanize. We will stand accountable for the teachers our joint efforts produce, and we are perfectly willing to stand or fall on their performances as new professionals in education. The final criteria of evaluation will be the joint and measured judgments of our professional teacher trainers in the college and in the elementary and secondary

school. The research of the validated evaluation criteria lies in the task analyses of lifetimes of successful teaching, as recognized by all, and the place on the gap continuum that the preparing teacher reaches at the end of the first phase (certification) of his training and education. Divergent, creative, and personal experiences will all be noted in the final evaluation. Far too much relying has been placed on the statistics of evaluation, and far too little on the experience criteria as seen by task analysis. We are producing human being-teachers, not machine-teachers!

Perhaps once again we should define our ideas in relation to a performance-based curriculum. We need to do this to tell the truth, even if the program does not come out neatly packaged, topped by an ornament which might prove to be a bubble! And so to explicate our meaning.

Taxonomy

1. There are performance objectives that can be concretely and specifically defined and measured.
2. There are performance objectives that cannot be directly defined, but can be indirectly defined in terms of other specific and observable behaviors, and so measured.
3. There are some objectives of the learning process that cannot be defined indirectly and cannot be tested or measured; however, they can be evaluated by a skilled master teacher. We must remember the difference between measurement and evaluation.

When we have recognized the above, we have at once included another element of a truly humanistic education in the context of demonstrated truth, rather than in the context of a closed system.

Our evaluative procedures in the ATEP Model proceed from the taxonomy outlined above.

Another innovation is the arrangements that we have made with the Cooperative Urban Teacher Education Project of the Mid-Continent Regional Educational Laboratory of Kansas City, Missouri. Those persons who wish can do their student teaching there. This will provide for students who wish to work at community centers and community service schools or teach in the inner-city schools. This CUTE program is then a component of the ATEP Model at Mount Mercy.

Finally the program is highly innovative in the importance it places on attitudes being "thrown-out" and values being taught by the examples of the teaching teachers; this is the absolutely-required component that we have learned to implement through our study of curriculum history. The program certainly on the one hand stresses learning rather than "teaching" (teacher as source of all knowledge); however, on the other hand, the total emphasis of the ATEP Model Program is on the Teacher as the Real School--the teacher instructing by example, not words. This is truly a time-tested idea, but it is overlooked today in the preparation of teachers; we have included it at the highest level.

Student Guidance

The learning teacher is encouraged to frequently use both academic and personal guidance. Skilled persons are available for these helps both at Mount Mercy College and in the Portal Schools.

The students do monitor their own progress and administer the program to themselves. In the context of seminar groups and feedback teams, the students will give much guidance also to each other. Each student has three faculty advisors, a member of the education department, a member of the academic department, and a member of the portal school. Records in the Scheduling Center are always available for guidance helps. During the in-service two-year period this same guidance team is available to the new teacher; and even after that, for the rest of his professional life; even in a distant location, the mail and the telephone accommodate this guidance function; then from these experienced teachers there will be constant feedback into the guidance system.

Management and Control

Each student's progress through the ATEP program will be monitored both by the student and faculty members of the Education Department; the faculty of the Education Department will also include Adjunct Professors (without pay, except for those engaged in Student Teaching Supervision) from the Portal Elementary and Secondary Schools.

The Scheduling and Operation Center in the basement of the library will contain the files of the student's progress. The student will show his paid bill to the Center Manager who will in turn issue to the student the block of Wilkits for which he had previously registered.

In the same Center the student signs up for learning activities; signs up for seminars to be held with an instructor and other students; shows signatures when he has completed a module (Wilkit) and takes required tests. Peer teaching in the micro setup is also arranged for in advance. Portal school assignments will be posted in advance, in the Scheduling and Operation Center; as these assignments will periodically change (to give the students both elementary and secondary experiences during their first year), it will be necessary to visit the Center almost daily. Other announcements pertaining to the Program will also be posted in the Center. Teachers (of the College) will have to check daily in order to see what seminars the students need that day, and the time; since there will be no "course load" for the instructor, this will pose no problem, except for arriving at school at 8:00 A.M. Faculty, then, will be scheduled on a day-to-day basis.

The Center will have a counter, a testing room, and a micro-teaching room.

The Master Control Book will be maintained in the Center by the Center Manager, a para-professional.

Students will keep up their own cards in the card file.

There will also be several Seminar rooms in the basement of the library; small; 10-15 people each, and the Seminar will go

with a minimum of five students who have signed up for it.

Teachers' offices, required for many individual learning conferences, will also be in the basement of the library.

It is recommended that the language lab be moved to the basement of the Library for use in the program, as well as for present use.

It might be well to mention here some other things about operation and administration.

The teacher's role has changed, and there may be a conflict of roles; no longer is the teacher a "dispenser" but rather a "facilitator". Need teachers willing to assume dual roles, they need to fit flexibility around solid schedules.

All pass if complete; no credit if students don't complete; they take again and pay again.

The level of proficiency to complete, equal to about "the usual B".

The Wilkits are spiral-back, perforated books, and they are consumed in each attempt.

It is easier to use Weber State's process and later to adapt, if needed.

To do this, a micro-teaching lab is needed in both the college (peer-teaching) and in the public and private portal schools. The best way is to have a teaching experience with 4-5 children, lasting 5-10 minutes, and all of it videotaped. It is easier to leave the Sony camera and monitor in the private or public school that co-operates.

It is better to schedule the showing of films.

Film strips and tapes are viewed at the Operation Center.

Introductory Field Experiences are required (15 hrs. in elementary and 15 hrs. in secondary required of all students.) This phase will begin immediately after the Orientation Week.

One "old course time" requires about sixty hours of Wilkit working time.

Students involved in Wilkits spend more time than when doing conventional work. Students have to work as there are no "snap-A's" and no memory work.

The responsibility has shifted to the student, both as regards his scheduling and his progress time. Pre-testing out saves some time, but the students have to work harder in this program. Time is no longer held constant, rather concepts are held constant, and time varies. This tends to develop a more responsible teacher.

Wilkit fee is charged with tuition; all eight Wilkits in Reading (equivalent of $3\frac{1}{2}$ sem. hrs.) costs $10,00, @ $1.25 per Wilkit. There are no additional costs to the student.

Students have to register for a block of Wilkits at the beginning of the term.

Grading policy is used, "B" indicating completion, but the student's thinking has changed; he is interested in concepts more than grades. Students either Pass or Try Again; they do a self-evaluation at the end of the module.

Teachers have to "live through it" and get student feedback; students don't get hung-up on grades; "progress-oriented" not "grade-oriented".

In preparation for this ATEP program, a week's orientation session will be held at Mount Mercy College. It is anticipated that administrators (college and school districts) and teachers (college and school district) will attend. There will be scheduled in-service work, in addition, at regular times, every year.

In the orientation session all will study the components of ATEP as found in this book; they will discuss the need for human interaction; what constitutes a learning package (Wilkit or locally-constructed module); how to write objectives; have professional consultants to assist; have "give and take" sessions; discuss the role of the teacher in this new setting, working through the learning activities; go over all the Wilkits, looking at specific activity components, listing and sorting out activities; they will need to look at the kinds of activities and their scope and sequence, and how to get "double milage". They will need to get acquainted with each other and with the personnel of the Library, the Media Center,the Curriculum Library, and the Scheduling and Operation Center. The faculty expertise must be tied-in with the Wilkits on locally-constructed modules; they should consider their areas of specialization and areas of interest. When a teacher moves into a course block, he has to be <u>completely prepared</u>, ahead of time. The contact hours with students are fewer but smaller group work forces the teacher to make every minute count. Make no mistake about it: to prepare a better breed of teachers takes more planning and more work from the faculty than in the traditional system. From the AACTE 1972 National Convention's reactions, it would be 100% correct to state that <u>all</u> teacher training institutions sooner or later will have to go this route, or they will "go out of business".

We will study now; pilot in the year, 1972-73, both with modules and portal schools, then go to the full program in 1973-74. In the meantime we hope to have Dr. Parkinson of Weber State to visit Mount Mercy, then later the Mount Mercy people will visit Weber State for a full week:

We will take time now to plan how facilities can be arranged in close proximity and how we can plug-in the present learning materials and media we now have, into the Module program.

Certainly from the experiences of others we will happily see our students lose interest in the grading system as they turn toward a desire for the terminal behavior and the objectives of the program; as other students have proven, our students will be willing to work in order to be able to perform.

Aptitude for teaching will be tested at the beginning of the program and guidance advisors assigned. The students will select from instructional alternatives on a daily basis, and this will schedule the professors and facilities. Professors will keep track of students' attitudes.

The ATEP Program will be under the direction of the Project Director who is also Chairman of the Department of Education. The Director will be assisted by the enlarged Teacher Education Committee. The Director of the Media Center and the Director of the Scheduling and Operation Center will report to the Project Director; communications will be maintained with the Head Librarian who will be an ex officio member of the Teacher Education Committee.

The enlarged Teacher Education Committee will also function as the Project Advisory Committee, to cut down on meetings and duplication. The management of the program will involve several sections:

- The faculty of the Department of Education
- The members of the Teacher Education Committee
- College Administration
- Public and Private School Administration

All personnel involved in the program will fit into several components:

- The Administration Component
- The Operations Component
- The Teaching Component
- The Support Component
- The Curriculum Component (including Feedback)
- The Portal Schools Component
- The Evaluation Component
- The Public Information Component
- The Records and Retrieval Component

After the program has been in full operation for one year, uses to fit aspects of the Program to the Computer at Mercy Hospital will be studied, decided, agreed-upon, and implemented.

The total reorganization of the Department of Education will be necessary for the operation of the ATEP Program. The program will operate as outlined above. The Program Director will report to the Academic Dean. It is anticipated that a number of approvals will have to be obtained prior to the implementation of the program:

The Administration of Mount Mercy College

The Faculty of Mount Mercy College

The Administration of the Joint County School System

The Administration of the Cedar Rapids School System

The Administration of the Cedar Rapids Private Schools

The Approval of the Iowa State Department of Public Instruction

All approvals have been tentatively secured with the exception of those to come from Mount Mercy College's President and Faculty. There is no reason to assume that these will not be forthcoming; given the state of teacher education, the demands of the hiring schools, the better job opportunities for teachers trained in this manner, and the wishes of the students. The present Teacher Education Committee has already approved the ATEP Program Concept.

The costs of the program will be small indeed as it can be carried out in the present context with the possible shifting of the bound periodical room of the library. Visits to Weber State and the cost of the salary of a para-professional are seen to be the only outstanding costs of the complete program.

<u>The Pilot Program costs are none</u> since the Media Director will be asked to also serve as Director of the Scheduling and Operation Center during the Pilot Year (1972-73).

<u>Placement and Followup</u>

It is hoped that the familiarity of the Portal Schools' Administration and Teaching Personnel with the Preparing Teachers, over a four-year period will assist the newly certified teachers

in obtaining teaching positions in the Joint County School System, The Cedar Rapids School System, and in the Cedar Rapids Private Schools.

The regular Placement Offices services of the college will, however, be available to all who complete the ATEP Program; in addition, the Program will disseminate the names and qualifications of its graduates to nation-wide Placement Organizations.

The Portal School Concept as a major feature of the ATEP program is seen as a facilitator in effecting the student's transition into the teaching profession:

Follow-up services will be maintained with both local and away teachers for a two-year period of intensive follow-up and feedback. It is anticipated, however, that professional contracts established in the ATEP Program will be maintained over a lifetime of service in the profession.

Feedback will enable the program to constantly change its components to take care of required adjustments.

There is no oversupply of teachers qualified to take innovative positions in innovative elementary and secondary schools; the oversupply exists in teachers who have been trained in traditional ways.

At any time during his professional career, the ATEP in-service teacher may request help from the program or an evaluation of his competence as a teacher; the program will continually assist each teacher to upgrade himself. Closer ties with the college will emerge as the result of the ATEP program.

The Pilots

Prior information has been given about the logistics of the pilots (1972-73) of the ATEP program; to recap:

- The need for one room in the basement of the library, close to the Media Center
- No additional personnel
- No additional space
- No additional equipment
- Only additional costs will be trip to Weber State and visit here by Dr. Parkinson
- The following are the courses selected to be eliminated and modularized in the year 1972-73:

Fall '72 Pilots

Ed 102	Foundations of Education
Ed 204	Principles of Teaching Physical Education
Ed 245	Media for Teachers
Ed 312	Teaching of Reading

Spring '72 Pilots

Ed 151	Educational Psychology
Ed 165	Art for Elementary Teachers
Ed 225	Principles of Secondary Ecucation
Ed 245	Media for Teachers
Ed 257	Elementary Curriculum
Spd 265	Creative Dramatics

CHAPTER IV

SUMMARY; CONCLUSIONS; RECOMMENDATIONS

Mount Mercy College Authentic Teacher Education Program

Mount Mercy College
Sister Mary Agnes Hennessey
President
1330 Elmhurst Dr., N.E.
Cedar Rapids, IA 52402

Dr. Ron Van Ryswyk
Academic Dean

PROJECT ADMINISTRATOR
Dr. John Weldon, Chairman
Department of Education
1330 Elmhurst Dr., N.E.
Cedar Rapids, IA 52402
319-363-8213

The ATEP Program is designed to compliment the many advances already made in the areas of education content and methodology and cause these gains to be reflected in the process of professional preparation and certification for the elementary and secondary level teacher. The Division of Certification of the State Department of Public Instruction has recognized the need for new teacher education programs using as yet untried methods of achieving certification. Mount Mercy College has been invited to establish such a program and has been promised almost outright guarantee that accreditation will be assured for at

the very least an experimentation cycle. From this assurance comes the ATEP Program.

The ATEP design will structure the content for professional training in conjunction with laboratory and field experience as determined by performance objectives in teacher education as follows:

1. Specifically what the student is called upon to do as he performs his preparation requirements.
2. What specific skills the student must acquire to most effectively organize for and carry through to completion the assigned areas of professional preparation.
3. What specific designs for evaluation and measurement will be required to illustrate to the student, to educators, and to the Division of Teacher Education and Certification, a highly successful and effective movement through the ATEP Program.

In that the unifying core for all the benefits to each group is the acquisition of skills and performance in education-based objectives, the close integration of content study with laboratory and field experience is designed to insure that the student will: (1) have continual opportunity to relate theory to practice at all stages of the program, (2) be provided a broad spectrum of experiences illustrating and providing contact with the potential teaching models, (3) experience reality even at the earliest stages, thus illuminating the problem areas, and aiding the student in becoming more comfortable with children

and schools, (4) gain insight into his particular strengths and grow confident in using them as well as see himself more clearly as a teacher, or reject the image altogether, (5) increase his sense of responsibility and ability to budget time, and maintain or increase his rate of progress through the ATEP Program.

For all courses the student will be given a block of Mount Mercy College ATEP modules). Each module will give substantive guidance for the specific activity of the student, the ability to be acquired by the student, and guides for an evaluation of the student's progress, which will be used by the student, faculty, and those concerned with state certification. The present courses will be eliminated by the module concept. Weber State's plus some of Mount Mercy's modules will be used in the program.

The ATEP Program, while not necessarily identifying new skills, will illustrate a fresh method of guiding the student in the acquisition of the needed content and skill in eliciting participation from the student. The process by which the desired results is gained, that of a new teacher approaching the classroom, is a definite departure from the standard technique which may well have outlived its usefullness for meaningful education in our present milieu. Certainly the evaluative criteria sought for ATEP are to be sensitive and germane to the need for individual appreciation and achievement of each student.

The Program objective achievement in the content areas of the modules of instruction and the relationship to specific

experience may be well illustrated through the examples of Reading. Within the broad scope of Reading as a skill to be acquired by performance objectives in the process of teacher education, seven or eight modules will be developed encompassing at least the following component areas: (1) Building concepts, (2) Comprehension, (3) Read-Study, (4) Listening, (5) Developing Readiness, (6) Spelling, (7) Individual Differences, (8) How to Study (9) Word Recognition, (10) Speed Reading, (11) Choral Reading, (12) Interest and appreciation.

Narrowing down to one possible specific module for Reading (as an example, used here for illustration purposes) the specific skill of word recognition would have the familiar breakdown as follows:

Reading: Word Recognition Techniques:

1. Word meaning skills (1) inferring meaning from content clause (b) classifying the words according to meaning (c) recognizing synonyms and antonyms, (d) homonyms, (e) studying words with more than one meaning, (f) matching words with definition.

2. Phonetic Analysis and Ear training skills (a) recognizing consonant sounds, (b) recognizing consonant blends, (c) recognizing phonetic elements, (d) knowing long and short sounds of vowels, (3) recognizing vowel combinations, (f) recognizing vowels with r, er, or, ir, ur, (g) recognizing rhyming words.

3. Word structure skills (a) recognizing base words in derived words, (b) omitting first or last letter to make a new word, (c) recognizing compound words, (d) finding a little word in a longer word, (e) dividing words with syllables, (f) recognizing contradictions.

4. Word building skills (a) forming plurals by adding s, (b) forming plurals by adding es, ies, (c) adding ing, ed, y, er, est, ly, (d) adding commonest prefixes to words, (e) adding commonest suffixes to words.

5. Dictionary skills (a) alphabetizing, (b) syllabication, (c) vowels, accents, guide words, (d) respelling for pronunciation, (3) pronunciation key (f) definition-multiple meanings.

The freshness of the approach as stated above will be in the method of gaining the content and necessary skill in translating that content in order to accomplish the performance objective within the classroom of guiding students toward Reading Ability in its highest sense. The outside of college classroom experience related to the content material of the modules will include:

1. Opportunities to observe and participate in tutoring work with small groups of children, participation in classroom routine, and interviews with school personnel, all on an increasingly more difficult level, as determined by local elementary and secondary personnel.

2. Weekly seminars, individual depth work, symposiums, panels, occasional large group meetings.

3. Microteaching while working on lesson planning.

4. Approximately six hours a week for four years, working in the public and private elementary schools.

5. Student teaching for nine weeks for full days. (Senior year).

The student "practice" teaching readiness should within the course of the program have progressed to such a point as to require a reassessment of the "normal" student teaching segment as now carried on. The overall program design should therefore include provision for the sharing of information with the at large profession in order to prepare for the "new" student teacher. The evaluation component of the module will be correlated for review and dissemination to aid in this strategic task of evaluation.

This model is a plan of action, a map, and a guide to an Authentic Teacher Education Program at Mount Mercy College.

This summarizes the Authentic Teacher Education Program at Mount Mercy College. Certainly we hope that the reader may have concluded, at this point, that this is the direction for Teacher Education to take here. The Model will be submitted to both the AACTE and Office of Education, for funding.

The Department of Education and the Teacher Education Committee recommend this Program to the State of Iowa, Department of Public Instruction for approval of the pilots and the program; and, to the President and Faculty of Mount Mercy College for adoption of the pilots and program.

John J. Weldon

John J. Weldon

Chairman, Department of Education

APPENDIX A

TO: Teacher Education Committee

FROM: Ron Van Ryswyk DATE: November 8, 1971

Attached is a short monograph by Jack Weldon which speaks in favor of the Criterion-Referenced Teacher Education Programs. I should like to add my endorsement to Dr. Weldon's proposal. In doing so, I should very briefly like to make just a few points.

1. The Department of Health, Education and Welfare has determined some time ago that no more Federal support will be forthcoming to teacher education programs unless they are of this proposed type.

2. Such programs have been adopted by some states on a state-wide basis. There is, therefore, no doubt of the workability and practicality of such models.

3. The Division of Teacher Education and Certification of the Iowa Department of Education has

   A. Invited us to submit such a program to them for their approval and by which they would grant certification to teachers completing the program.

   B. Reminded us that no program exists in the State on a completed basis, although most colleges in the State have shown a realization and an interest in such.

   C. Reiterated their feeling which is that most knowledgeable educators support that a performance based model of teacher education is superior to any program currently in use.

4. The program can be started in part if not in toto and I urge that we do so in whatever small degree we can as soon as possible, and at the latest have at least parts of it operative by Septerber, 1972.

5. The proven practical models such as the one at Weber State College are available for our modification and adoption. Therefore, we need not start from scratch. It seems that much of it could fit very easily into our current program without much disruption, indeed with enhancement.

6. I am not suggesting that we take any of the above steps without consideration, discussion, and study. I am suggesting that we begin this involvement immediately and if we find it attractive, that we establish the commitment to move forward in a unified manner.

There are several copies of the WILKITS, which Dr. Weldon mentions, available in my office. I am attaching one random WILKIT with this piece of correspondence. Please read and return it at the Wednesday, November 10, 4:00 P. M. meeting. Others are available to you. If you have any questions of any kind, I shall be happy to discuss them with you.

In my personal opinion, our decision on this program is the most important one to be made this year in the area of academic affairs. I trust that you will give in your fullest attention.

CRITERION-REFERENCED OR COMPETENCY-BASED TEACHER EDUCATION PROGRAMS

As many of you here at Mount Mercy know, teacher education programs around the country have been critized by educators, parents, students, the government, taxpayers and the general public. Much of the criticism seems valid; teacher training institutions have not been providing teachers who are able to deal with students and their education in today's complex world.

Valid and reliable educational research has indicated that there are better ways to educate teachers; one of the required ingredients is to provide students of education with educational laboratory experiences, both simulated and real, that happen outside the regular college classroom and which bring the future teacher in contact with schools, students, and society in general; these experiences should begin very early in the teacher education program and extend through the student teaching experiences with higher level tasks prescribed all along the route. We have begun a model for this ingredient through our participation in the Career Opportunities Program and a planned, subsequent and mini-model of COP for all students who plan to be teachers. This is the <u>experience</u> ingredient.

Perhaps even more important is the <u>academic</u> ingredient, and that topic is the subject of this short paper. For years scholarly educators have known a way to correct academic deficiencies in the preparation of teachers. In my doctoral dissertation I called attention to the work of Dr. Morrison at the University of Chicago in 1926. While many schools and teacher training institutions adopted his pioneer work in unit teaching, his larger meanings were overlooked. Largely through the availability of federal funds since Sputnik and before Nixon, educators like Robert Mager [1] took Morrison's

---

[1] Robert Mager, <u>Preparing Instructional Objectives</u> (Palo Alto California: Fearon Publishing Co., 1964)

work and constructed a new model for teacher education. This plan as implemented in actual teacher training programs is usually called "criterion-referenced" or "competency-based." It uses what we refer to as "behavioral objectives."

Behavioral objectives illuminate the intent of instruction for the instructor; when he states his objectives in behavioral terms he is better able to concentrate his attention on the object of instruction, namely, learning. By planning clear objectives of instruction, the teacher stands a much better chance of effectively leading his students to learn that which he intends to have them learn. Behavioral objectives also help to illuminate the purposes and intent of instruction for all those who have an interest in its outcomes ——— students; parents; principals; supervisors; school boards; college deans; tax payers; in general.

Perhaps one of the most important reasons for using behavior objectives is for the teacher to be better able to communicate with the above-mentioned people. The teacher must be able to tell them the intent and purposes of his instructional program in a consistent, orderly, and efficient manner. To do this he goes to the ends or objectives, of his instruction; if he fails to write them down they may change, so they should be written. Behavioral objectives eliminate vague and wordy statements of educational objectives and serve as a base for planning programs of instruction. A behavior objective, , according to Mager, is composed of three parts: a statement of conditions, a behavioral verb, and criteria of performance.

We believe that future teachers will be able to do these things only if their academic preparation is handled in a different manner than "taking courses." The State of Iowa has encouraged us to begin to educate future teachers in this manner as the people in the State Department of Education believe that competency-based teacher education will provide better teachers for the young people and children of Iowa. Certainly it has been thoroughly tested by institutions all across the country like Weber State in Ogden, Utah. The American Association of Colleges for Teacher Education recommends this new teacher training. The Office of Education in Washington not only

recommends it but will not longer fund programs like the Teacher Corps, unless the College phase of the program uses this new approach.

To sum up, by a criterion-referenced teacher education program we mean a program in which the competencies to be acquired by the student and the criteria to be applied in assessing these competencies are made explicit and the student is held accountable for meeting those criteria. The competencies, of course, are those specific understandings, skills, attitudes, knowledges, behaviors believed to assist in the intellectual, social, emotional and psysical growth of children. The way it works is this:

a) knowledge criteria are used to measure the student's cognitive understandings.

b) performance criteria are used to measure the student's teaching behaviors.

c) product criteria (pupil growth criteria) are used to measure the student's teaching effictiveness.

When we compare this new approach with traditional teacher training programs the criterion-referenced programs seem to offer a number of advantages. The student is fully aware of what is expected of him and how these expectations are related to his role as a future teacher because the criteria applied in measuring his competence are explicit and public, not vague and ambigious! In a competency-based program the student's achievement is held constant and time varies, just the opposite of a traditional program. This means that the student has to demonstrate mastery of a specific competence while allowing for student self-pacing. Those who can't perform will not be recommended for certification until they can, but time is no longer allowed to defeat a hard-working student. We all know that everyone learns at a different "rate of speed."

Traditional programs emphasize entrance requirements ——— and the Dean was correct in saying that my recommendation of a 2.5 was contrary to what we hoped to achieve in this new program ——— for a competency-based program emphasis exit requirements. This enables many to become teachers who might otherwise be excluded while at the same time insuring mastery of the specific competencies.

We feel that the advantages of the proposed teacher education program —— while not perfect —— will do much to eliminate poor teachers and poor teaching in the public and private schools of Eastern Iowa, and whatever Mount Mercy teaches may work.

To accomplish competency-based teacher education, instructional modules are used rather than "courses of instruction." An instructional module is a set of learning activities intended to assist in the student's achievement of an objective or set of objectives. The development of these modules is very complicated and difficult and beyond the staff we have that could be free to do this, and beyond the time that we would want to spend. If we use a proven set of instructional modules it is not difficult to adopt them to the Mount Mercy philosophy and objectives of the teacher education program. Attached to this paper is a sample of Weber Mate instructional modules; they are called "Willkits."

I hope that this brief paper may shed some light on what we are trying to do and why. I will be happy to supply the Teacher Education Committee with any further information that any member might require. I believe that if we understand, plan, and implement this new program of teacher education, Mount Mercy will be able to continue its leadership position in this area.

John J. Weldon, Chairman
Teacher Education Committee

JW/bh

APPENDIX B

11-18-71

PLANNING STATUS REPORT #1

ON PERFORMANCE-BASED CURRICULUM

As a result of the meeting of the Department of Education and the Academic Dean on today's date, some items have been clarified.

A. Planning Context:

We need to describe the following:

What do we do?
What do we need?
Additional equipment?
Additional space?
Additional money?

What approach?

B. Planning Input:

It was decided that the individual teachers should determine what things to do differently.

Secondary Education is perhaps going to write up some of its own modules and make a beginning in leaving the "class concept."

Elementary Education will probably use the Weber State models and "tailor-make" these to the Mount Mercy situation, beginning with the curriculum course.

Media expressed a need for assistance (personnel) in its implementation.

All three areas have actually been using behavioral objectives in present courses. It seems that now the thing to do is to plan by modules (topics), rather than by courses. This planning will be done in all the areas. At such time as we are better able to describe our planning, the Dean will back up the efforts of the Department and substantiate our position to the Educational Policies Committee and to the General Faculty; it is noted that the present steps being taken have the unanimous approval of the body primarily charged, namely, the Teacher Education Committee.

The Academic Dean has also relieved the Department from considerations of equipment, space, and money; he will assist in these matters; this frees the Department to concentrate on module development, adaptation, and planning for implementation.

The Chairman of the Department will find out the total cost involved in using the Weber State materials (Wilkits) for local adaptation.

C. Planning Process:

On Tuesday, November 23rd, the Chairman, after consultation with the Academic Dean, will call Sister Mary Edward Dolan

of Clarke College, Dubuque, Iowa; Sister, with her team, will just have returned from a visit to Weber State, Ogden, Utah. She made the kind offer to share with our Department the experiences they have had to the present date in the implementation of their performance-based Teacher Education Curriculum.

No doubt at this time Sister will set a tentative date for the visit of our Department to Clarke College. I feel that it will be very helpful for all to go, regardless of whether or not we use any of their ideas. The chance for questioning and sharing will be of great benefit, especially since this opportunity was offered to us, at no charge, by Clarke College. Sister Dolan's friendship with our President, Sister Mary Agnes, I believe, was of great help in this matter.

At the conclusion of this visit, which will probably take place in early December, we will be in a better position to evaluate, describe, and perhaps coordinate some of our planning.

After we will have then made some very fundamental decisions, it will be opportune to call on Dr. Blaine Parkinson

of Weber State to visit with us. He will be happy to do this for little more than travel money, and he has been working diligently in this area for some ten years.

After Dr. Parkinson's visit and due deliberation and planning by all members of the Department, I feel that we will be in a position to say what we will be implementing during the academic year 1971-72. At that time we should report back to the Teacher Education Committee and submit our planning model to the State Department.

D. Planning Product:

All along the route we propose to travel, we assume from prior conversations that we will have the blessing of the Iowa State Department of Education re-certification of our teachers prepared in a performance-based curriculum.

We intend to keep them informed of our progress and call upon them for logistic support where practicable.

If we all stay together and work hard in our module planning, I feel that we will indeed have a proud educational product and one that will be designed along the lines of forward-looking teacher training institutions. Please call on me for any help that I might be able to give.

Sincerely,

Jack Weldon

APPENDIX C

PLANNING STATUS REPORT #2

ON PERFORMANCE-BASED CURRICULUM

NOTES AND DISCUSSION

OCCASION

Meeting at Clarke College, Dubuque, Iowa, between Academic Dean, Librarian, and members of Education Department of Mount Mercy College and Chairman of Education Department of Loras College, and Chairman and members of Education Department of Clarke College; meeting held on invitation of Sister Mary Edward Dolan, PBVM, for information purposes relative to the implementation of performance-based curriculum in the Education Department of Mount Mercy College.

BACKGROUND PATTERNS AT CLARKE

About two years ago, Clarke College, Loras College, and the University of Dubuque formed a Committee of the Whole (The three college education departments) and two Standing Committees; Curriculum; Student Teaching. They initiated a joint calendar and cross-registration as well as joint student teaching supervision. They looked at many of the nine OE-funded, Performance-Based Teacher Education Models and decided to begin implementation on a pilot basis of the model they thought superior, that of Weber State College, Ogden, Utah.

PATTERN OF THE CHANGE AT CLARKE (AND LORAS)

1. Curriculum study
2. Move from courses to concepts (expressed as modules)
3. Found Wilkits of Weber State did not differ very much in the content of teacher education, from the old "courses".
4. Wilkit includes:
   a. Content (a concept)
   b. Learning Activities designed for:
   c. Behavioral Objectives
   d. Assessment: Pre-assessment
      Self-evaluation
      Proficiency assessment (a criteria-referenced test)
5. Held Dept. Meetings
   a. Content of Behavioral Objectives
      (write one; bring; interaction)
   b. Two year process of changeover was started
6. Can start by piloting Wilkits within structure of present courses.
7. Twelve Wilkits were piloted at Clarke

PATTERNS OF OPERATION

1. Establish Operation Center (in basement of Library)
   Students: show fee card
   pick up Wilkits in course block; e.g., all Reading Wilkits
   sign in for learning activity
   sign in for seminar with other students

show signatures when complete Wilkit,
and take test
arrange in advance, e.g. peer teaching

2. Center has Counter; testing room; microteaching room
3. Operation Center schedules faculty on day-today basis
4. O.C. keeps control book
5. Students keep up cards in card file
6. Four Seminar rooms;small; 10-15 people each; Seminar operates with minimum of 5 students who have signed up.

REMARKS

The teacher's role has changed and there may be a conflict of roles; no longer is the teacher a "dispenser' but rather a "facilitator". Need teachers willing to assume dual roles; they need to fit flexibility around solid schedules.

All pass if complete; no credit if students don't complete; they take again and pay again.

The level of proficiency to complete, equals to about "the usual B".

The Wilkits are spiral-back, perforated books, and they are consumed in each attempt.

It is easier to use Weber State's process and later to adapt, if needed.

To do this, a micro-teaching lab is needed in either the college (peer-teaching) or in the public and private schools. The best way is to have a teaching experience with 4-5 children, lasting 5-10 minutes, and all of it videotaped. It is easier to leave the Sony camera and monitor in the private or public schhol that cooperates.

Dial-access center not absolute.

It is better to schedule the showing of films.

Film, strips, and tapes are viewed at the Operation Center.

If Interaction Lab (a constant) is had, use Thiokol Kit ($800.00); it is centered on cognitive items, film, and pass-out sheets. You will have 8% psychological fallout in T-training.

In Clarke's program, Introductory Field Experiences are required (15 hrs. in elementary and 15 hrs. in secondary-required of all students).

Thiokol has 40 hours exposure time @ 90 minutes each; it is required screening and introductory for all; its Fundamental Skills in Teaching and the Wilkit on Self Concept are covered, here. Then the faculty gets into the act and interaction takes place.

Two quarter hours ("old course time") require about thirty hours of Wilkit working time.

Students involved in Wilkits spend more time than when doing conventional work. Students have to work as there are "no snap A's" and no memory work.

The responsibility has shifted to the student, both as regards his scheduling and his progress time. Pre-testing out saves some time, but the students have to work harder in this program. Time is no longer held constant, rather concepts are held constant and time varies. This tends to develop a more responsible teacher.

Wilkit fee is charged with tuition; all eight Wilkits in Reading (equivalent of 3 sem. hrs.) costs $10.00 @ $1.25 per Wilkit. There are no additional costs to the student.

Students have to register for a block of Wilkits at the beginning of the term.

Grading policy is used, B indicating completion, but the student's thinking has changed; he is interested in concepts more than grades. Students either Pass or Try Again; they do a self-evaluation at the end of the course.

Teachers have to "live through it" and get student feedback; students don't get hung-up on grades; "progress-oriented" not "grade-oriented."

CLARKE HAS:

10 video (complete sets); only need 1 or 2
overhead in every other classroom
a substation on every floor, having a movie projector; opaque; tape machine; record player; film strip projector
8 faculty members in education dept.

CLARKE RECOMMENDS:

1. Study; components of present program and the need for human interaction
2. What constitutes a learning package
3. Each staff learns how to write objectives
4. Have "give and take"
5. Discuss teacher is new and different teacher's role; work through the learning activities
6. Look at Wilkits: What are specific activity components, and list, and sort out activities
7. Kinds of activities, and scope and sequence; how to get double mileage?
8. Look to personnel: teachers
   scheduling center personnel
9. Tie-in faculty expertise with Wilkits; area of specialization and area of interest
10. When teacher moves into a course block, teacher has to be completely prepared ahead of time
11. Contact hours with students are fewer but face-to-face with smaller groups forces the teacher to make every minute count
12. All teacher training institutions sooner or later will have to go this route, for today's world

SUGGEST:

Study now

Pilot in Fall(ready facilities; ready students)
(Could lose students if not ready!)

Use laboratory experiences

Go to Weber State after completion of Pilots and stay a week, learning; $150 a day and travel is cost

Arrange facilities (sched ctr; A/V ctr; library) and faculty offices and seminar rooms in close proximity

Plug-in available learning materials (now have) into kits

Use Vimcets with specific objectives in mind

Students want terminal behavior and the objectives of the program and are willing to do work, to perform.

INFORMATION FROM WILLIAM C. BROWN PUBLISHING COMPANY

All modules in an area together

Whole program will be ready by Sept. 1972

Books out between Nov. and Mar. 1972

Educational Psychology and Reading will be first

APPENDIX D

WIL/Kits Breakdown

Elementary Reading

Numbers 26, 27, 28, 29, 30, 31, 32

Elementary Language Arts

Numbers 33, 34, 35, 36, 37, 38

Elementary Music

Numbers 40, 41

Elementary Science

Numbers 42, 43

Children's Literature

Numbers 44, 45, 46, 47, 48, 49

Social Studies

Numbers 50, 51, 52, 53, 54

Media

Numbers 20, 60, 70

Teaching Methods

One kit will contain numbers 1, 2, and 4. Another kit will contain numbers 80, 81, 82, 83, 84, 85

Professional

Numbers 16, 17, 18, 19

Art

Number 23

Math

Numbers 6, 9

Health

Numbers 14, 57

Orientation

Number 3

Educational Psychology

One group would be numbers 12, 21, 25. Another group will be numbers 7, 13, 10, 15, 5, 8. Another group would be numbers 22, 55, 11, 7.

APPENDIX E

MASTER LIST OF WEBER INDIVIDUALIZED LEARNING KITS (WILKIT)

November, 1970

WILKIT NO.	TITLE	ELEMENTARY	SECONDARY
1.	The Four C's of Teaching		X
2.	Lesson and Unit Planning		X
3.	Orientation to IPT	X	X
4.	Classrooom Management and Discipline	X	X
5.	Growth and Development	X	X
6.	Elementary School Math I	X	
7.	Principles of Reinforcement	X	X
8.	Transfer of Learning	X	X
9.	Elementary School Math II	X	
10.	Teaching and Learning in the Three Domains	X	X
11.	Educational Research and the Teacher	X	X
12.	Self Concept	X	X
13.	Motivation and Learning	X	X
14.	School Health Problems	X	X
15.	Needs and Characteristics of Adolescents		X
16.	Background of American Educational Practice	X	X
17.	Professional Relationships	X	X
18.	Professional Rights	X	X
19.	Professional Responsibilities	X	X
20.	Instructional Resources - Evaluation, Selection, and Utilization	X	X
21.	Classroom Group Meetings	X	X
22.	Purposes and Methods of Classroom Evaluation	X	X
23.	Art in the Elementary School	X	
24.	Student Record and Referral Services	X	X
25.	Group Processes		X
26.	Reading Study Techniques	X	
27.	Reading Readiness	X	
28.	Nature and Instructional Implications of Reading	X	
29.	Basal Approach to Teaching Reading	X	
30.	Phonic Analysis Skills	X	
31.	Structural Analysis Skills	X	
32.	Written Communication	X	
33.	Dictionary Skills	X	
34.	Reading Comprehension	X	
35.	Handwriting	X	

WILKIT NO.	TITLE	ELEMENTARY	SECONDARY
36.	Spelling	X	
37.	Listening	X	
38.	Oral Communication	X	
39.	The Language of Music	X	
40.	Music for Children	X	
41.	Chording and Harmony	X	
42.	Inquiry in Elementary Science	X	
43.	Organizing and Planning for Teaching Elementary Science	X	
44.	The Role of Children's Literature in the Elementary School	X	
45.	The Nature and Selection of Children's Books	X	
46.	Children's Literature - New Developments in the Field	X	
47.	Children's Literature - Traditional Literature	X	
48.	Poetry for Today's Children	X	
49.	Meaningful Experiences with Literature	X	
50.	Social Studies in the Elementary School	X	
51.	Social Studies Resources	X	
52.	Social Studies for the Culturally Disadvantaged	X	
53.	Social Studies Skills Development	X	
54.	Elementary Social Studies Instruction	X	
57.	Tutoring Techniques		X
60.	Media Production - Preservation	X	X
61.	Media Production - Illustration	X	X
62.	Media Production - Lettering and Printing	X	X
63.	Media Production - Coloring	X	X
64.	Media Production - Transparencies	X	X
65.	Media Production - Display and Manipulative Devices	X	X
66.	Media Production - Audio and Video Devices	X	X
70.	Media Equipment Operation - Motion Picture Projectors	X	X
71.	Media Equipment Operation - Video Systems	X	X
72.	Media Equipment Operation - Slide and Filmstrip Projectors	X	X
73.	Media Equipment Operation - Overhead Projectors	X	X
74.	Media Equipment Operation - Opaque Projectors	X	X
75.	Media Equipment Operation - Sound Recording and Reproduction		X
80.	Classroom Strategies - Lecture Demonstration		X
81.	Classroom Strategies - Inquiry		X
82.	Classroom Strategies - Individualization		X
83.	Classroom Strategies - Group Activities		X
84.	Classroom Strategies - Team Teaching		120
85.	Classroom Strategies - Simulation Games and Role Playing		X

APPENDIX F

AVAILABILITY OF WILKITS

We plan to have WILKITs published through the Wm. C. Brown Publishing Company of Dubuque, Iowa. Some titles will be available approximately January 1972. It is planned that most will be available by July 1972. Because of the numerous requests for copies, we are making them available prior to publication for a handling charge of $1.50 per WILKIT. It is very likely that the price for the published WILKIT from the Wm. C. Brown Publishing Co. will be a dollar or less. We have provided multiple copies to a few schools outside Utah for field teaching.

All of the WILKITs are being revised prior to publication. Some of the pre-publication copies will not be the final revised copy. They will however, in almost all cases, be copies that have been successfully used in the IPT Program.

Prior to publication, the pre-test, self-test, and multiple forms of the post-test or proficiency assessment will have had extensive revision by instructional technology consultants with the help of our own faculty. These tests will be validated and will be a strong component of the WILKITs.

We are also completing an observation instrument somewhat on the format of Flanders Interaction Analysis. It is designed to evaluate the ability of the student to apply the skills taught in the WILKITs. Our first experience with the instrument looks very promising. We will not only be able to evaluate student performance in the classroom with this instrument, but it will also give us feedback in evaluating the behavioral objectives of the WILKITs.

APPENDIX G

WEBER STATE COLLEGE
INDIVIDUALIZED PERFORMANCE - BASED TEACHER
EDUCATION PROGRAM (IPT)

PREPARED FOR AACTE - SEPT. 1971

Blaine P. Parkinson, Director
Curriculum Development & Research

In the Fall of 1970 at Weber State College in Ogden, Utah an Individualized Performance-Based Teacher Education Program was initiated. It was not just a pilot program but represents the only route to teacher certification at the college. It was made possible by a grant from Carnegie Corporation of New York. The traditional lecture has disappeared. Teaching textbooks and testing on footnotes have disappeared. The grading game is no longer played. The threat of failure no longer hangs over the heads of students. In spite of this radical change, problems have been limited mainly to the mechanics of the program with little protest from students or college administration.

Development of the program was based on the following points: Validated teacher education programs are rare or non-existent. Funding limitations did not permit building from a task analysis or starting from the vantage point of the learner and then working back to teacher behavior, even if these had been entirely acceptable philosophically. These would, however, be appropriate approaches. The established teacher education program with its concern for teacher behavior was adapted by changing the delivery system into one that had <u>self-correcting potential</u>.

Self-instructional units called WILKITS were developed. The elements of a WILKIT are as follows: The title is usually a single concept or skill, such as a. lesson and unit planning, b. motivation, c. group process, or d. reinforcement. The scope suggests to the student what he is going to be studying. For example, a. the nature of motivation, b. how it develops, c. the factors effecting it, or d. some particular motivational strategies. Many of the kits will have a short introduction, which is some special concern or message the faculty wants to give the student. The pre-test is used to a. see if the student has pre-requisite skills, b. see if he already knows the material, c. motivate students, and d. diagnose for proper placement in the WILKIT. The pre-test is a brief test; if the student appears to know the material, he may then take the final test to see if he can check out. Behavioral objectives (developed in cooperation with EPIC Diversified Systems Corporation of Tuscon, Arizona) state as precisely as possible what the student should be able to do when he has completed the WILKIT. An attempt is made to use those learning experiences which will best help the student to achieve the behavioral objective. There may be readings, seminars, public school experiences, films, tapes, peer teaching, microteaching, etc. Most of the learning experiences are optional. That is, the student may determine which of the experiences are necessary to his achievement of the objectives of the WILKIT.

Each WILKIT has a self-test so the student can monitor his own progress. It shifts responsibility to the student and lets him assess his readiness for the final. Tests are designed to measure the Behavioral Objectives, not the learning experiences. For a final assessment the student may be asked to complete an oral interview, an objective or essay examination, a performance check-out for demonstration of competence or a combination of these.

A WILKIT may require from 5 to 30 hours to complete and carry 1/2 to 1 quarter hour credit. Registration is by blocks of complimentary WILKITS with up to 14 quarter hours credit.

In the Secondary Education Program there are about 25 WILKITS; in the Elementary Education Program there are about 50 WILKITS. Students register at the regular registration time, but they may finish any time. If they want to start a block of WILKITS before registration, they may do so.

In the Operations Center, students check out WILKITS, sign up for seminars, make appointments to see faculty members, arrange for peer teaching, take tests, or meet informally with other students. With an individualized program any one activity such as a film, seminar, or audio tape, must be rotated regularly so that a student will not have to wait very long to get any one activity.

EPIC is now working with the teacher education faculty to develop an observation system geared to the behavioral objectives of this program. It will then be possible to go into the public

school situation or the student teaching situation, and evaluate how well a student is performing the skills taught in the WILKITS.

This is to allow the student to move from theory, to practice under controlled conditions, to a realistic application experience. Most of the WILKITS have some public school exposure. Elementary Education students are in the schools for about 66 hours prior to student teaching; as well as doing a good deal of peer teaching and microteaching. In the past students have always said,"Teacher education is too theoretical." Now they are saying, "I can see where it applies." Teaching practicum centers are being developed to improve the student teaching experience. Each center will be led by a clinical teacher who knows the teacher education program and the skills which are being taught in the WILKITS. This teacher might work with as many as three student teachers at any one time. When the student teachers complete, other student teachers can be phased in. In this system planning is maximized. Supervision is maximized. Feedback is maximized, and the opportunity to teach is maximized. Periods of passive observation and imitation of the cooperating teacher, so long a part of student teaching, are reduced to a minimum.

Much criticism has been leveled against the A, B, C grading system. It is a norm reference system, where students are compared with each other. Comparison may be the only base that makes sense in some types of instructional situations. The whole game of testing in a norm reference system is to spread people out; variation in achievement is expected, in fact, the system forces it. In a

criterion reference system - the Weber State objective - a clearly specified goal is set. If one meets the goal, he passes. If he doesn't meet the goal, he recycles and tries again. If he meets the goal and wants to do more, a new goal is set. rather than doing a lot of busy work to get an A. In the traditional system, certain things are held constant. Instruction is held constant, assignments are held constant, time is held constant; but achievement is varied. It seems to make more sense to vary instruction, vary the assignments, vary time, but hold achievement constant. How else can there be significant quality control?

The Interaction Laboratory is a unique human relations training program. It was developed to Weber State College specifications by a division of Thiokol Chemical Corporation of Ogden, Utah. It is a group experience with twenty-six 90-minute exercises. It is experiential but structured to teach essential human relations skills. Groups consist of about 15 students with a trainer and a co-trainer. A session usually has a short activity followed by a group discussion on its implication for teaching. The lab has gone remarkably well. Students say it's the most significant experience they have had in college. They not only feel good, but can articulate concepts they have learned. The lab builds a lot of positive effect, a lot of trust and openness with people. It's established a new student-faculty relationship.

Most of the first year was spent in asking students how they liked the program or what was wrong with the WILKITS. The quality

of their critique has been impressive, for dialogue can center in a particular objective or learning experience which can then be modified in response to their comments. Also, students are amazed that the program is quickly modified. Responses of students are as follows: "Last year I took two education courses. I figured I'd sit there and do what I had to do and get a C. So I did, I got a C and I learned nothing. This year I've had to learn something to pass the WILKITS, and do you know what, I've really enjoyed it." "Behavioral objectives are great. I know where I'm going and I know when I've achieved them." "For the first time in college I'm learning to take responsibility for my education." Enough such comments have been made by students to create a very positive feeling about the first year. It is clear that the students are seeing themselves and teacher education very differently. The big task of evaluation lies ahead. It must be demonstrated that students can apply their skills in the classroom. It will then be necessary to look at what their pupils learn. Many of the WILKITS are now being used at other schools.

The performance-based individualized approach has taken Teacher Education out of the horse and buggy stage and into the Model T stage. The Model T stage may not be much better now, but through combined efforts, we will soon be into the jet stage and may develop a true technology of teaching.

APPENDIX H

AN INDIVIDUALIZED PERFORMANCE-BASED PROGRAM FOR TEACHER EDUCATION

David R. Cox: Keith R. Burnett
Weber State College

Critics of American education, which include almost everyone it seems, frequently focus their attention upon the methods by which teachers are trained. Few of them "point with pride" but many "view with alarm". In fact, the teachers college has become a whipping boy for every malcontent who has a gripe against any part of the educational enterprise. Nevertheless, there exist many legitimate concerns in the minds of laymen and educators alike regarding the efficacy of many practices in teacher education.

Much of the criticism has focused upon the hypocrisy of those entrusted with teacher education. They have been accused of failing to put their own houses in order, so that the precept they teach is "do as I say but not as I do". Course content and training activities have often been trivial and extraneous to the task of learning to be a good teacher. Consequently, teacher training has often not met the needs of a modern educational program. Ironically, many elementary and secondary schools have already implemented innovations which are badly needed at the college level. Serious students have perceived the lack of sound teaching models and appropriate learning experiences and have often lost interest and a sense of personal committment to their training program.

A successful program of teacher education has been in operation at Weber State College since 1962. Nevertheless, in spite of proven strengths of the program, members of the teacher-education faculty were not satisfied with the results from this more traditional system of training teachers. The belief

persisted among them that a different approach might provide better results.

Deficiencies in this more traditional approach, as sensed by the faculty, were reflected in the following kinds of questions:

> How can the curriculum be shaped to the essential requirements for teaching, thereby eliminating trivial or extraneous material?
>
> How can the responsibility and initiative for his professional preparation be shifted to the student so that he will have a personal committment?
>
> How can the lock-step of teacher education be broken so that more than lip service may be given to the individual needs and abilities of the students?
>
> How can students develop an acquaintance with varied models so that they may develop skill with a number of teaching techniques?
>
> How can prospective teachers develop more knowledge and skills in human relationships which are so important in good teaching?
>
> Can teacher training be improved through use of field experiences and modern technological developments?

The decision was made to develop a program which would provide adequate teacher preparation for modern education. After three years of study, planning and writing the beliefs and ideas were translated into an individualized, performance-based program. This program (IPT) includes all pre-professional teacher training at Weber State College. As various phases were developed they were field tested and operations began in September of 1970*.

*The development of this program was made possible by a grant from the Carnegie Corporation.

Rationale

This program of teacher education was more concerned in the preliminary stages of its development at least, with the revitalization of the teaching and learning process rather than a reexamination of curricular philosophy and content. However, many revisions, both in philosophy and content, occurred during the process of planning and development. The principal thrust concerned individualization of learning and the establishment of performance-based standards of evaluation.

Format

Prospective teachers begin their training with a pre-professional introductory field experience during their first or second year of college. This is a thirty clock-hour experience in which approximately fifteen hours are spent in an elementary school and fifteen hours in a secondary school. The student may thereby have an opportunity to relate to a modern public school situation, reexamine his choice of teaching as a career and determine the level at which he chooses to teach.

The second part of the training program is an interaction laboratory consisting of a series of scheduled informal group sessions covering forty hours of class time. The purpose of this laboratory is to develop basic understanding of the principles and of the importance of human relationships in the educational setting. The course is not designed for in-depth therapy or for treatment of an individual's personality problems, but is planned to improve self-understanding and to develop some degree of skill in human relations.

Learning activities in this human relations laboratory take place in an informal and friendly atmosphere. Each group is composed of ten to fifteen students with a trainer and a co-trainer. Faculty members serve as trainers after having had training in conducting group laboratory activities. Advanced students who have gone through the interaction laboratory usually function as co-trainers and receive credit for doing so. Activities consist of role playing, simulation games and action-oriented problem solving with informal discussions ending each session.

The third aspect of the training consists of a series of self-instructional units which have been named Weber Individualized Learning Kits (WILKITS). These units are arranged in course blocks with assigned credit so that a student may register for a block of credit which contains several WILKITS.

Each WILKIT is separately packaged and covers one segment of professional training, such as Lesson and Unit Planning, or Motivation and Learning. However, the format is the same for all WILKITS so that the learner may know what to expect. Nevertheless, the style of writing in each kit may vary according to the subject and the author's inclinations.

Every WILKIT has a preliminary statement or introduction delineating the purposes and values of that unit. There is also a pre-assessment to estimate level of proficiency. If the student has already attained competence in that given area he may complete the evaluation procedures and thereby conclude the WILKIT without pursuing the learning experiences.

In order to focus upon learning outcomes, the goals for each kit are

specifically set forth in a list of behavioral objectives. These objectives are based upon a system of classification and therefore indicate the level of learning to be attained in each instance.[1] The required standard of performance on the part of the learner is also specified for each objective. The learner is thereby informed at the outset of the level of performance required for each WILKIT.

The emphasis of the program is upon attainment of a desirable level of proficiency. The learning experiences for each WILKIT are designed to provide opportunities for acquiring competencies indicated by the behavioral objectives. The learning experiences may include varied activities such as readings, conferences, seminars, audio-visual presentations, student projects, microteaching, peer teaching, and field experiences.

Many of the learning experiences are optional so that the student may select his course of learning pursuant to mastery of the required proficiency as indicated by the stated objectives. However, some experiences may be required if they are deemed to be an essential part of the learning process. Additional learning experiences may be suggested which go beyond the indicated minimum, or the student may request additional activities such as seminars or conferences.

All WILKITS contain self-evaluation devices such as problems, self-tests,

[1] Benjamin S. Bloom et al. Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. New York: David McKay, 1956.
David Krathwohl et al. Taxonomy of Educational Objectives, Handbook II: Affective Domain. New York: David McKay, 1956.

and video-taped teaching performances. When he believes that he is ready, the student may begin the evaluation phase of the unit.

Final evaluation procedures may consist of written or oral examinations, performance check-outs, or a combination of these. Judgment of proficiency is given as "pass" or "fail". As indicated above, the required level of competence is stated. However, this level may vary from one objective to another. For example, the level required on an examination might be seventy or eighty percent of the items correct, while a teaching performance might require a higher level. All evaluation techniques are designed to measure behaviors specified in the behavioral objectives as indicated above. Evidence of ability to apply and perform is sought in all evaluations. If the student is unable to perform at the required level, he may recycle and try again at another time.

Late in the program, when the student has reached a prescribed level of preparation, he will begin the teaching practicum. This field experience consists of a full quarter of work at an assigned practicum center in one of the public schools of the area. At the center each student will usually work as a member of a team of experienced teachers.

As the practicum centers develop, it is planned that each team will be headed by a clinical teacher who will have direct responsibility for the training experiences of students on his team. College faculty members will serve as consultants to the teams.

Members of each team will be familiar with the total training program and will be responsible for evaluating the understandings and skills of a prospective teacher in actual teaching situations. Thus, essestial proficiencies

taught in the program will be assessed and students will be recycled for more training if necessary. In this way, the trainee will have an excellent opportunity to perform under optimal conditions with expert supervision constantly available.

Anticipated Outcomes

This plan will provide a curriculum which is shaped to the needs of a teacher. Materials are selected which seem to have relevancy to the teaching-learning process and the student will make practical applications of that which he is learning.

The student will have responsibility for his progress and has an opportunity to exercise his initiative. He may proceed at his own rate and plan his learning experiences. The flexibility of the program will provide more opportunities for attention to individual students and for individually prescribed learning experiences.

Standards of performance will insure that a student can perform at a given minimum level of competence. The student will no longer be able to merely sit through his courses and pass by making a minimum score on the final examination. Individual effort and performance are necessary requirements.

As a result of the varied learning activities, the student will have many different learning experiences upon which to base his development as a teacher. He will also have opportunities to evaluate his own understandings and techniques. In addition, he will gain knowledge of the use of modern technology as applied to learning.

Emphasis will be given to human relationships in teaching. The student will realize the importance of teacher-pupil relationships and will gain a better understanding of himself. He will also improve his skills in working with young people.

It is hoped that in the course of his training the student is not only introduced to certain concepts, principles, skills and attitudes but that they become an integral part of his professional capabilities.

APPENDIX I

Performance Based Teacher Education

Talk Given at Logan, Utah

By Hugh Baird

April 30, 1971

At our institution, like many others, we spend a lot of time planning for such things as auto-tutorial systems, information retrieval systems, self-instructional library tours, large screen t.v., self-instructional modules and laboratories, portable VTR programs, and on and on and on. These planning and delevopment activities reminds one of a story often told of the airplane pilot who interrupted his passengers to announce that he had good news and bad news. The good news was that they were in a jet stream and were making excellent time, the bad news; that they were lost. If you read our critics, you will get the message that we're lost, in spite of the excellent speed we're making, in spite of the excellent technological progress which we have made. Many people, including our students, are saying that teacher training has missed its mark and is floundering in serious trouble. They are certainly not entirely correct in their accusations, and yet, we do need to improve our means of training teachers. This paper suggests that even more critical than concern for means is the attention we should be giving to ends. Teacher training programs should spend considerably more time and energy defining what a trainee will be able to do as a result of his training to become a teacher.

We need to test many of the assumptions upon which our teacher training programs are being based and on which they have been based for many years.

The following is a list of these assumptions:

1 High College GPA's correlate positively with excellent teaching.

2. No one really knows what good teaching is. (This doesn't get challenged until I get home to the supper table and listen to my children who seem to know, who seem to be able to tell the difference as they sit at teachers' feet each day at school.)

3. Early and continuous contact with children insures or enhances teaching excellence. (This is a very popular assumption today.)

4. There is direct positive correlation between the amount of time a trainee spends in practice teaching and the degree of excellence he will attain. (This has not been verified. In fact, one study from Columbia University says that the longer trainees spent in student teaching the more dogmatic they became.)

5. There is direct positive correlation between the amount of time a trainee spends in attending teacher education classes and his degree of excellence.

6. Passing education courses as they presently exist correlates highly with excellent teaching.

7. Effective teaching can only take place in the public schools.

8. A performance based teacher training system will automatically insure excellent teachers.

9. Teacher performances which can be observed are usually those which are useless. (We may not yet know how to describe worthwhile performances but that doesn't mean they can't be described.)

10. Only those persons with credentials are capable of teaching, i.e., causing learning to take place.

These assumptions are listed to illustrate the critical task which must be done before we will have developed excellent teacher-training systems. Performance based programs may be part of the solution. Moving from experience based to performance based teacher training can help us test many of these assumptions. We would then have a standard against which to evaluate the elements of a training program.

Schalock, in a working paper for Task Force 72 supports this idea.[1]

"As things now stand, the development and operation of education programs and teacher education programs have to take place essentially without benefit of empirical data, and that is a circumstance that cannot be permitted to exist. If the proposals made in the present paper were acted upon it could begin its alteration..."

"Most teacher education programs operate today on a minimum of information. Little is known about student interests or abilities or background or projected plans; little is known about the effectiveness of a given instruction-learning experience for students who vary on any of these qualities; and little is known about the appropriateness or usefulness of the learning objectives established for the preparatory program, from either a short-term or long-term point of view. Even students in preparatory programs rarely know whether what they are doing has genuine utility for their performance as professionals. Upon analysis it can honestly be said that a great many educational personnel development programs operate without being at all clear as to what it is they are attempting to do, why they are attempting to do it, and whether or not they have been effective in doing whatever it is they are trying to do. Students within such programs tend to suffer similar fates."

All persons don't view teaching as being the same sort of thing. Some view teaching as <u>self enhancement</u>, a process through which learners are helped to value themselves, to see themselves as being worthwhile individuals. Some view teaching as an exercise in <u>group dynamics</u> where there is more stress on sharing, on concern with role, on organization and function of groups. Some view it was <u>intellectual achievement</u> or bringing about intellectual achievement where the emphasis is on mental activity; where the effort is toward a demonstration of intellectual prosess. Some view teaching as mainly <u>technology</u>. Where the stress is on system, with the emphasis on programming, on system analysis, on task analysis, on the use of appropriate instructional materials and means. Some see teaching as the

---

[1]H. Del Schalock, Research Professor, Teaching Research, A Division of the Oregon System of Higher Education.

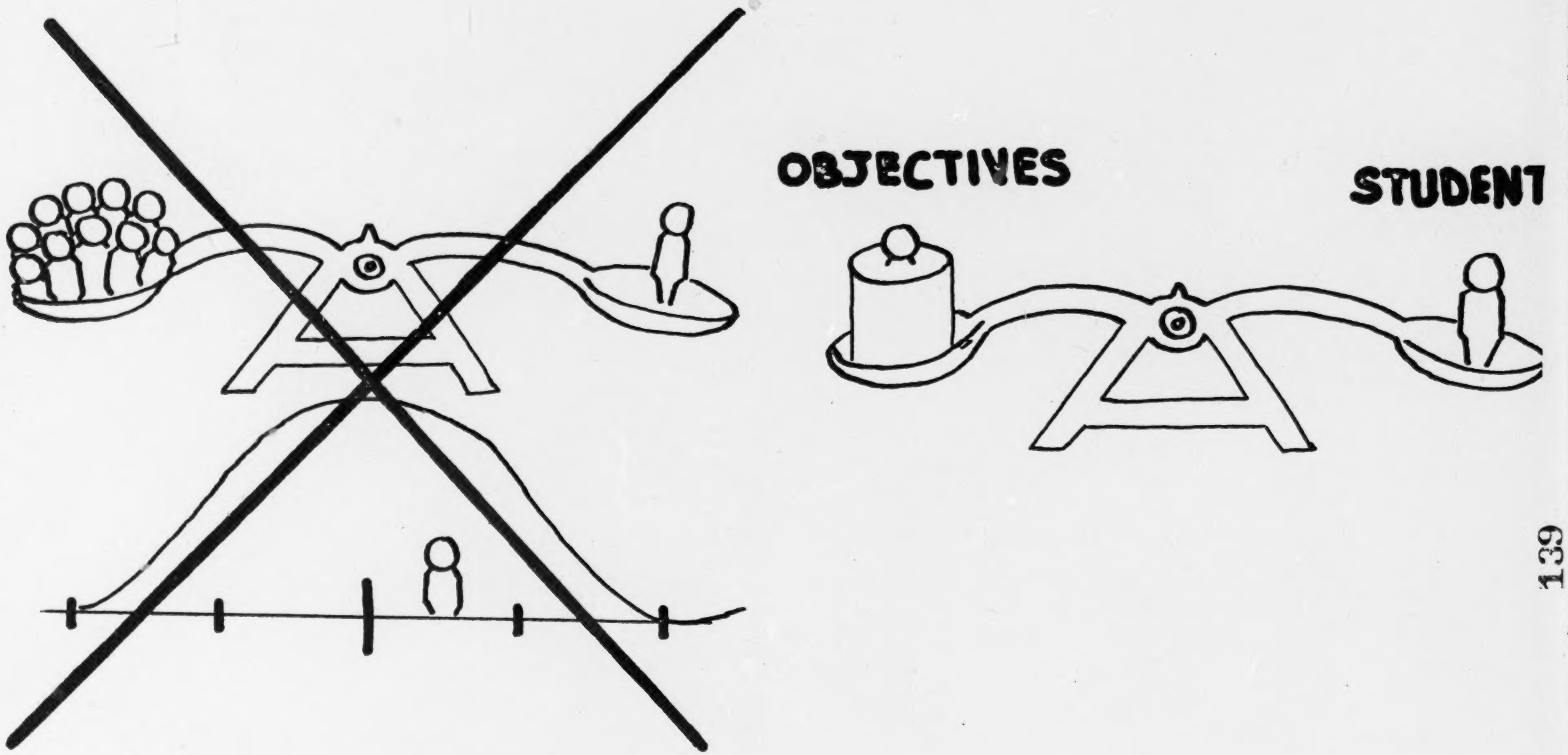


FIGURE 1

management of contingencies. Where with appropriate stimulus and feedback, we can condition or train learners to do what they need to do. It doesn't matter for the present discussion how one views teaching, no matter how it is viewed, should not a teacher be able to do it? If teaching is perceived as group dynamics, should not teachers be able to conduct group activities? If it is viewed as intellectual achievement, should not the teachers be able to get intellectual achievement from their learners? Or the management of contingencies, shouldn't they be able then to manage contingencies with learners? Let's not quarrel here about what teaching is, whatever it is, teachers ought to be able to do it. When we talk about doing it, then we are talking about performing.

There are some elements which are probably essential to performance based teacher education. The first of these is illustrated in figure 1 which is drawn to suggest that in traditional classes a learning is compared with the other learners in the system.

This is called normative evaluation or norm referenced evaluation. Most people at some time in school have complained about being "put on the normal curve." This is a process of evaluating which judges one person in

terms of what other learners in the class or system are doing. A performance based system has got to work on a different base. The normal curve can't be the basis for evaluation. Instead of the normal curve, learners--prospective teachers--must be judged against specified performance. Against the things which they must eventually be able to do. An element of the system must be a kind of evaluation where a student is evaluated in terms of his ability to produce or to perform rather than in terms of what other students are doing, and certainly rather than upon the experiences he has had.

The training system must be self-corrective. If it is performance based it must be able to seek and respond to feedback from the users of the system. This quality of being self-corrective is not required in performance systems but because even though at this point in time we know some things about what excellent teaching is, we know comparatively little. As we identify performances to be attained by trainees we are going to make mistakes. The profession does not yet have all the data needed on which to base and establish the performances. We, therefore, need to build a self-corrective system which constantly gets feedback from the society, from the community, from children and parents, from the users of our product, if you will, and modifies the systems in terms of that feedback.

Ultimately we're going to have to ask as parents do now, "Well, I wonder what my child will be able to do at the end of this year that he can't do now as a result of these teachers with whom he studies." Information on the growth and achievement of school children needs to come into the system, even though it may not yet be the major discerning factor, it needs to come into the system, so that the system can be dynamic and so the system can continue to improve.

The content of a performance based system must be sound. This is a critical element in any teacher training system. Technology can now help us develop marvelous systems of training teachers. In fact, one program at BYU employs a record-keeping system which uses the computer to produce a printout of each trainee's standing in the program as often as is wished. It tells exactly which performances students have demonstrated and which ones they still have to do. That system is rather polished and quite fine. The flaw is that if the right performances don't get taught, then the system gets in the way, it lulls us to sleep and deludes us into thinking we have an excellent training program when all we have is a good vehicle to carry garbage, if I may use the analogy. And so, we've got to look at what that vehicle is carrying, and look past the system, past the gadgetry, to the outcomes which the program is designed to produce.

There is one other element which is critical in performance based programs. In some way they all must accommodate the individual differences of those going through the system, the perspective teachers. We know enough to know that when we say, "You must perform before you exit," that all students are not going to perform at the same rate, or in the same manner, and the system must accommodate that difference in rate, that difference in learning style, difference in ability, in achievement. It must be individualized. There are many ways to accomplish individualization, but however it is done it must be there. Large group classes, or even lectures, cease to produce results, they cease to have a function, at least a very real one.

In summary then, performance based teacher training programs must contain the following elements:

1. They must be criterion referenced.

2. They must be self-corrective.

3. They must contain worthwhile content (The performances must be those that produce desired results with children).

4. They must be individualized to trainees different learning styles, abilities, interests, and talents.

5. They must be based on more than assumptions about training experiences and teacher skills and outcomes in children.

APPENDIX J

TRAINING FOR THE FUTURE OF EDUCATION

Jon I. Young W. Dwayne Belt

Brigham Young University

Prior to the 1970's it was the goal, and even the responsibility, of teacher training institutions to close the gap between supply and demand. Graduates were being certified as quickly as they could accumulate the minimal credit hours required. We have now met that responsibility and the lack of certified teachers no longer is a problem. The challenge of the 70's will be to produce quality teachers.

Today's public is becoming dissatisfied with the quality of education being offered in schools. In our eagerness to fill the classrooms with certified teachers we failed to improve the nature of the pre-service training. Since it is assumed that there exists a positive correlation between the type of training received on the University level and the type of teaching in the secondary and elementary classrooms, the time has come for the teaching profession to pause and take a serious look at its training programs.

The modern training program needs to be versatile enough to accomodate the individual needs of each student and be structured sufficiently to incorporate minimal training for all students. Figure 1 illustrates a model of a proposed teacher training program on the university level.

Insert Figure 1 here

Young, 1971

Each of these components will play an integral part in the preparation of pre-service teachers.

Research

Merrill (1971) identifies three levels of performance in instructional design. This program would produce material from two levels of performance. The level of the scientist illustrates the task of attempting to formulate new theories, or modifying old theories in relation to instructional problems. At this level this branch will be concerned with identifying crucial variables in the instructional sequence and finding parameters to optimize the instructional process. This scientific level will determine the accuracy of existing models of instruction (Gagne, 1965; Bloom, 1956) as well as models of human learning (Hilgarde and Bower, 1966). Emphasis will be in attempting to discover accurate relationships between models and variables.

The research branch will also focus on the technologists or engineering level (Merrill, 1971). In this domain instructional development will be the goal. Attempts to apply the theoretical findings to practical situations will follow. Projects, requiring skilled personnel to develop, validate and test instructional material will be solicited from the University. Techniques and results of findings at this level will be generalized and/or modified to meet specific needs at the public school level. The Instructional Research and Development at Brigham Young University is the functional model of this branch (Merrill & Harrison, 1970).

Experimental

Once the theoretical and development procedures are established the

second branch of this model can be optimized. By establishing individualized teacher training program the theories developed at IR&D can be initially tested under controlled conditions. This branch will not only serve as a field test of possible teaching techniques but will actually train a sizeable number of teachers.

Enrollment in this program will be limited to 130 or 150 prospective teachers per year. They will be admitted to the program with the understanding that the approach is experimental and frustration may be a common occurrence. The program will be flexible and individualized to meet student differences and yet some structuring will be present to insure at least minimal training and necessary controls to adequately field test the instruction designed.

Besides the purpose of field testing instructional design techniques, there will be a second intent. The third level of performance in instructional design (Merrill, 1971) is that of an instructional technician. Here student will be trained in the implementation of the material devised by the technologists. The success or failure of any instructional material rests with the person who will utilize the material. This is to be done by giving the prospective teacher appropriate models to follow and allowing adequate practical experience to be integrated in the theoretical preparation.

This program is presently in operation at Brigham Young University under the title of the Individualized Secondary Teacher Education Program (I-STEP). One other aspect of this model should be apparent. The flow of information between IR&D and I-STEP is not a one way circuit. To

the contrary, theoretical "truths" are often indirectly found, thus techniques and procedures that are found to be successful in the instructional process can lend credence to or support for the theoretical reasoning and technological implementation of the research branch. Just so likely new approaches can be investigated and theories disproved by establishment of techniques in practical situations in the experimental branch.

Integrated Program

The end result of the first two branches will be formulation of generalized procedures which can be utilized in the organization of an integrated program for teacher training. However, the integrated program needs to meet specific requirements.

Selection

For the teaching profession to achieve the respect and status it needs, the connotation that "if I can't succeed in industry, I can always teach" needs to be dissipated. No longer can we afford to certificate anyone who wants only insurance for the future and, in fact, we are training teachers for unemployment if we do. To combat this trend screening procedures for pre-serv ice training applicants must be implemented. These procedures can only be done through logical approaches and trial and error attempts. Most of the criterion measures of potentially good teachers are subjective estimates which lack validity.

Psychological testing is not totally reliable but at least allows the training staff some insight about prospective program candidates. Through systematic record keeping and test refinement some concrete

Young, 1971

screening procedures should become available. However, care should be exercised not to restrict teacher training to those "superior" individuals. One of the basic aims should be identification of those persons who are anxious to become excellent teachers and who are not so dogmatic they cannot be trained.

Performance

Even though Dr. Tyler (1950) proposed performance based criterion over twenty years ago and Mager (1962) indicated an approach to achieving performance criterion, little effort has been directed toward performance based experience. The time has come to give serious consideration to the usefulness of grades in teacher training programs. The most justified procedure for certification would be on the basis of competency in accepted behaviors. The recommendations for prospective teachers would then list specific areas in which the applicant has become competent, based on predetermined criterion.

By allowing for a program of this nature students could pursue specific interests in different areas, i.e., underpriviledged children, ghetto schools, etc., and be certificated in those areas only.

Internship

As a means of introducing the pre-service teacher to the profession and as a screening procedure, an internship with immediate involvement in the public school classroom is proposed. Already many schools are employing these types of long-range training programs. These programs have several advantages. First, the principles and theories can be taught in a more relevant manner by relating to the actual experiences the trainees are having.

Young, 1971

Second, cooperation between the university and the school system would be enjoyed. No longer need the trainee be torn between opposing views of the two training institutions. A team of supervisors could be selected to meet with and counsel the trainee throughout his training program.

Third, the team of supervisors can meet together as a committee to periodically review the progress of the trainee and outline alternate activities to meet the individual requirements of the students.

Fourth, the experience will permit the trainee, in consultation with his advisors, to experience varying approaches to humanize his teaching. The problems and theoretical aspects of human relations can be brought to bear in the actual situation so that teachers don't become like mechanical devices trained to optimize learning by removing the human element.

Cooperation

The teacher training program can be expanded to work with specific subject areas by involving faculty from these areas. The program then becomes responsible to the university as a whole rather than under the complete direction of one specific college.

This will encourage the participation of academic departments so that advancement can be based on the joint decisions of several disciplines and the expertise of competent individuals.

Conclusion

The essence of the proposed model would be a separate program, employing inter-departmental participation (as well as public school

Young, 1971

personnel) in providing for training procedures which are both relevant and theoretical in nature.

The purpose of teacher preparation should be to train devoted students to cope with the problems of modern education by affording them the opportunity to meet these problems with abilities which are designed to keep them, rather than channel them into anachronistic patterns of response.

The training should include instruction and practice in several teaching techniques. Prospective teachers should be able to clarify their own values before trying to influence the values of others. They should be confident in their own abilities to teach. Finally, each teacher should be exposed to the research aspect of teaching. Without the effort of the classroom teacher in testing theoretical assumptions, even on a very general level. any attempts at improvement will be fruitless. It is the teachers of today and tomorrow who should set the direction of educational research. Without their help the cry of irrelevance from students and the general public will continue.

Young, 1971

B I B L I O G R A P H Y

Bloom, Benjamin S., et. al. (eds.) Taxomony of Educational Objectives: Handbook I: Cognitive Domain. New York: David McKay Co., Inc., 1956.

Gagne, R. M. Conditions of Learning, New York, Hold, Rinehart and Winston, Inc., 1965.

Hilgard, E. R. and Bower, G. H. Theories of Learning, New York Appleton Century-Crafts, 1966.

Mager, R. F. Preparing Instructional Objectives. Palo Alto, California, Fearon Publishers, Inc., 1962.

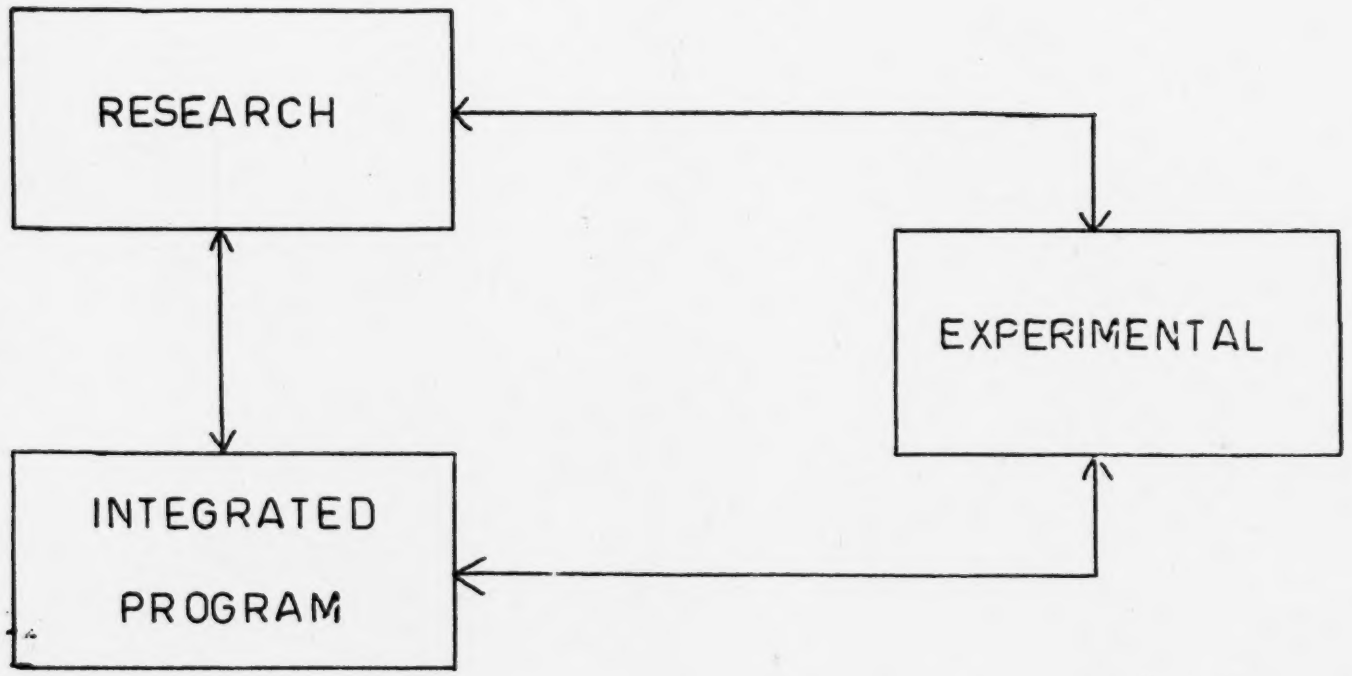
Merrill, M. D. and Harrison, G. V. "Instructional Research and Development at Brigham Young University: A Statement of Philosophy and Intent," Unpublished manuscript, 1970.

Merrill, M. D. "Patterns of Adaptation to the Individual Differences in Teacher Education," paper presented at the American Educational Research Association, February, 1971, New York.

Tyler, R. W. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago Press, 1950.

Young, 1971

Figure 1. Model of Teacher Training Program


RESEARCH
EXPERIMENTAL
INTEGRATED
PROGRAM

APPENDIX K

CONTINUOUS PROGRAM IN THE TRAINING OF SECONDARY TEACHERS AT BRIGHAM YOUNG UNIVERSITY: RATIONALE, CONTENT, STRUCTURE, AND ORGANIZATION*

by

Lyal Holder
Dwayne Belt
Hugh Baird

Introduction

This paper describes an experimental program for the pre-service training of secondary school teachers currently being tested at Brigham Young University.

Presently the program provides within a one-semester structure, nineteen of the twenty-three semester credit hours required for certification. Students move through the material at their own pace in that they may complete assignments ahead of deadlines if they wish. The project is not fully individualized as yet because of the time limit imposed by its semester structure.

A major departure from conventional teacher education programs is seen in the performance orientation of the program. That is, pre-service teachers are recommended for certification on the basis of their ability to perform the behaviors that good teachers perform, rather than on their ability to endure a sequence of professional education courses.

---

*Combination of two papers read at AERA, February, 1968.

Since the course began in the spring semester, 1966, with eleven students, we have done the following:

1. Tentatively identified those things which a secondary teacher needs to know and be able to do to begin as a certified teacher--and translated these essentials into written behavioral objectives for the course.
2. Modified the amount and kind of student teaching experience.
   a. Cut time in half.
   b. Assigned student teachers in teams of two or three.
   c. Substituted micro-teaching for some of the in-class student teaching time. (We have found no noticeable differences between the graduating secondary teacher who micro-taught and those who student-taught full time.)
3. Combined almost all course work (19 hours) into a unified semester of work, eliminating unnecessary course overlap and allowing inclusion of new and vital content.
4. Rewritten course content to help pupils move through the program at their own rate.
5. Tested these changes for four semesters.

Approximately sixty students have completed the program during the four-semester pilot period.

Program Rationale

In an age of education characterized by innovations,

research in learning and teaching, changing roles for the teachers, and teachers demanding more voice in the educational enterprise, the professional certification program of secondary teachers is yet often based upon the taking of a series of required education courses.

A number of questions can be raised about the efficiency of the present system of training teachers. Some of these questions are:

1. Is it justifiable to assign a student teacher to a less than excellent supervising teacher simply because there are not sufficient excellent teachers available?
2. Is the assumption valid that each student teacher needs an identical clock-hour requirement of public school practice teaching?
3. Since each trainee is unique in his abilities, interests, and needs, ought we to provide more for individual differences than is possible within the present program?
4. To what extent can and should new approaches to examination of teacher performance (e.g., video tapes, classroom interaction analysis, micro-teaching) be utilized in a teacher preparation program?
5. Does taking a series of courses guarantee any degree of proficiency on the part of the teacher to perform the tasks required in our present educational

system?

Answers to some of these questions are being sought by the faculty members at Brigham Young University who are engaged in the program described in this paper. This program is currently being tested with small groups of secondary trainees.

The faculty members associated with the Secondary Experimental Program at Brigham Young University are convinced that certification based on a series of courses and credits is no longer desirable. They feel that the ability to perform certain specified behaviors is a more rational basis on which to certify individuals to teach in the secondary schools. The innovations of team teaching, continuous progress education, non-graded schools, and the expanding use of technology in our schools have helped change the role of the teacher to an identifier of learning problems and a director of learning activities rather than a presenter of information. More and more teachers are being given opportunities to assume the responsibility for individualizing instruction, for counseling students, for curriculum changing and curriculum writing, instruction through diverse methods, for emphasizing the processes of inquiry and discovery, for cooperating in planning the presentation of programs, for guiding students in the process of self direction, and for identifying learning activities which are appropriate and effective in large group instruction, small group instruction and independent study situations.

Since teachers tend to teach as they have been taught, it is necessary that prospective teachers be trained in a program where the emphasis is on teaching and learning behavior designed to facilitate the changing practices in the public schools. This program might be a learning situation in which opportunities are provided for experiences with various media, evaluation on some other basis than facts alone, the importance of interpersonal relationships, student examination of his values related to education, faith in the ability of students to help educate themselves, and the teacher as a resource person and facilitator. Included in this program must be opportunities for the prospective teacher to assume individual responsibility for his own study and learning. This type of program would preclude the common practice of instructing all students of a given class as though they were identical in achievement and readiness for learning. Groups of students can be taught, but only individuals can learn.

During the spring semester, 1965, an experiment was conducted at Brigham Young University in a beginning methods class to determine if there was a significant difference in learning between students who complete the course in a self-paced mode and those who complete the same course in the traditional lecture discussion mode. The results of this research seemed to justify moving even further into an

examination of our conventional teacher education program.[1]

In designing such a program for prospective secondary teachers, consensus on the desirability of all the practices that could be undertaken might be difficult. However, the function of helping students to learn more effectively and more efficiently would probably find rather general approval. To learn most efficiently, one must have specific goals or objectives. Teaching and instructing are processes and are not ends, goals, or objectives. Processes without ends, goals, or objectives seldom last. If, for some reason they survive, they often produce unspecified outcomes which are more the result of accident than of planning. To avoid accidental outcomes resulting from the teaching process requires prior statements of objectives or intended outcomes. The outcomes of such teaching are overt behavioral acts or behavioral products.

Specifying behavioral objectives for prospective secondary teachers was one of the first steps taken in preparing the experimental program. Approximately sixty were originally written. The research on effective teaching and learning provided essential teacher behaviors from which we began

---

[1]Clark Webb and Hugh Baird, "Learning Differences Resulting from Teacher- and Student-Centered Teaching Methods," paper presented at American Educational Research Association Annual Meeting, February 16-18, 1967, New York.

Victor Bunderson has since conducted similar research to verify these data. Victor Bunderson, "Computer-Assisted Instruction in Self-Paced Teacher Education," paper presented at the annual meeting of the American Educational Research Association, Chicago, February, 1968.

our list. Analysis of communication problems between teachers and parents, pupils, and administration provided additional behavior. Some of the objectives came as a result of our personal experiences as teachers and supervisors of teachers. Data about students--their similarities, differences, needs, abilities, development patterns, and styles of learning provided the basis for other objectives.

The identification of these objectives gave direction to the identification of concepts and skills which a student must have at his command in order to perform the behaviors which are specified. Once terminal behaviors and their related concepts and skills were identified and placed in sequence and priority, the entire range of curriculum was open to all of the students. Specification of behavioral objectives also provided the opportunity to preassess the prospective teacher's abilities and to determine the point at which instruction for that individual should begin.

The behavioral objectives with their accompanying skills and concepts in the Secondary Experimental Program at Brigham Young University have been determined as the basis of the changing role of the teacher and the teacher's responsibility of representing himself and the educational institution within the profession and within the community. These objectives are listed in a monograph to be published by Multi-State Teacher Education Project.

Once the curriculum has been specified the student then can progress towards certification at his own rate. He

is not dependent upon a series of courses and his rate is not determined by his fellow students. Progression through a specified program at his own rate provides the pre-service teacher with a better model of teaching behaviors needed in our educational system than the present conventional program. The student is allowed to progress as far and as fast as his capability and initiative will allow by using prepared curriculum materials to guide his independent study. A prospective teacher also sees the possibility of using such procedures in his own classes when he begins to teach.

As a student proceeds through the program at his own rate, the performance criteria which have been identified in the behavioral objectives give quality control to the program. Those pursuing such a program can perform certain specified behaviors with at least a minimal level of performance or they are not recommended for certification. Provision is also made for the student to perform at any level above the minimum commensurate with his initiative and ability.

With such a program the student no longer spends a specified time in a program working towards certification. No longer is certification based upon a certain number of course hours but upon the ability of the prospective teacher to perform the behaviors identified in the program.

Purposeful instruction requires knowing not only what the goal is, but also what is required to get there and how to tell whether or notone has reached it. Continuous Progress Instruction provides for student learning best when

the following are most clearly stated:

1. The goals or objectives for instruction, stated as terminal student behavior.
2. What a student needs to know or learn to achieve the objective(s), in the form of conceptual and skill statements.
3. Preassessment procedures to determine where the student enters the program.
4. The processes for achieving the objective(s) in the form of learning activities.
5. Evaluative procedures.

The following example illustrates these five elements, as the student would see them for one objective.

3.10 Behavioral Objectives

The preservice teacher will:

1. Write at least nine educational objectives which are behavioral according to Mager's criteria; at least three of which would be classified in each of the following categories: affective, higher than lowest cognitive and psychomotor.
   a. Objectives for at least two of these categories are to be written in the student's major or minor fields.
   b. The three objectives in the higher than lowest cognitive category will be written in a sequence so that one behavior leads to the next.

c. The parts of at least three of the nine objectives will be labeled according to the criteria identified by Mager.

Conceptual Statements

I. A behavioral objective states the learning goal as intended outcomes: overt terminal student behavior or a behavioral product.

A. Overt behavior is observable behavior.

B. A behavioral product is an observable product resulting from student behavior, e.g., a picture, a dress, a play script, any other written material, etc.

II. Mager establishes three criteria for an instructionally useable objective.

A. It should state the intended outcome in terms of terminal student behavior.

B. It should state the important conditions under which the student will be expected to exhibit the behavior.

C. It should state at least the minimal or the acceptable criteria of performance.

III. Behavioral objectives are of three types: affective, psychomotor, and cognitive.

A. Affective behavior involves changes in attitudes, interests, values, and the development of appreciations and adequate adjustment.

B. Psychomotor behavior involves neuro-muscular

or motor skills.

C. Cognitive behavior involves recall or recognition of knowledge and the development of intellectual abilities and skills.

D. The cognitive behaviors are taxonomically classifiable, i.e., they describe behavioral change from simple to complex with each succeeding behavior including the preceeding, simpler behaviors.

1. Knowledge--involves the recall of specifics and universals, methods and processes, patterns, structures or settings from appropriate signals or cues.
2. Comprehension--involves the use of the materials or ideas of a communication, regardless of the symbolic form of presentation, in terms of the literal meaning, i.e., the receiver can demonstrate the use of an abstraction, for example.
3. Application--the selection and use of an appropriate abstraction (concept, generalization, or principle) without having to be prompted as to which is correct or having to be shown how to use it in a given situation.
4. Analysis--emphasizes the breakdown of a communication into its constituent parts detecting the relationship of the parts, the way

they are organized, and even the techniques and devices used to convey the meaning or to establish the conclusion of a communication.

5. Synthesis--the putting together of elements and pairs so as to form a more complete (than in comprehension, application and analysis) whole not clearly there before.
6. Evaluation--the making of judgments for some purpose using criteria or standards for appraising the extent to which particulars are accurate, effective, economical, or satisfying.

Preassessment

If you feel you can perform the behavior called for in the objective above, see the graduate assistant for preassessment instrument.

Learning Activities

1. View at least once the filmstrip-tape presentations, "Educational Objectives," and "Selecting Appropriate Educational Objectives" using pretest, involvement worksheets, and post-tests when applicable.
2. Study Mager's Preparing Instructional Objectives.
3. Study the written reserve materials, "Types of Objectives and "Student Examples of Behavioral Objectives and Related Conceptual Statements."
4. Study the audio tape "Types of Objectives and Their Classification." A workbook and an involvement sheet

are on reserve which are to be used with this tape.

5. Take written examination, "Behavioral Objectives," if you wish to have this learning activity. The examination requires you to differentiate among statements as to whether they are:
   a. Behavioral or non-behavioral according to criteria established by Mager.
   b. Behavioral objectives primarily affective, psychomotor, or cognitive in nature.
   c. Objectives calling for behavior at the lowest cognitive level, or at a level above the lowest.
6. Write behavioral objectives to satisfy the objective above and evaluate them with your team.

Evaluation

1. Submit written examples of the objective above.
2. Use appropriate written objectives for all teaching plans.

Organization for Instruction

The second step, which proceeded concurrently with the identification of behavioral objectives, was the organizing of learning experiences both varied and comprehensive enough to help prospective secondary school teachers attain the objectives. Just as persons from different institutions would undoubtedly create differing lists of behavioral objectives for a teacher training program, so might the means to accomplish objectives differ widely from one institution to another. The

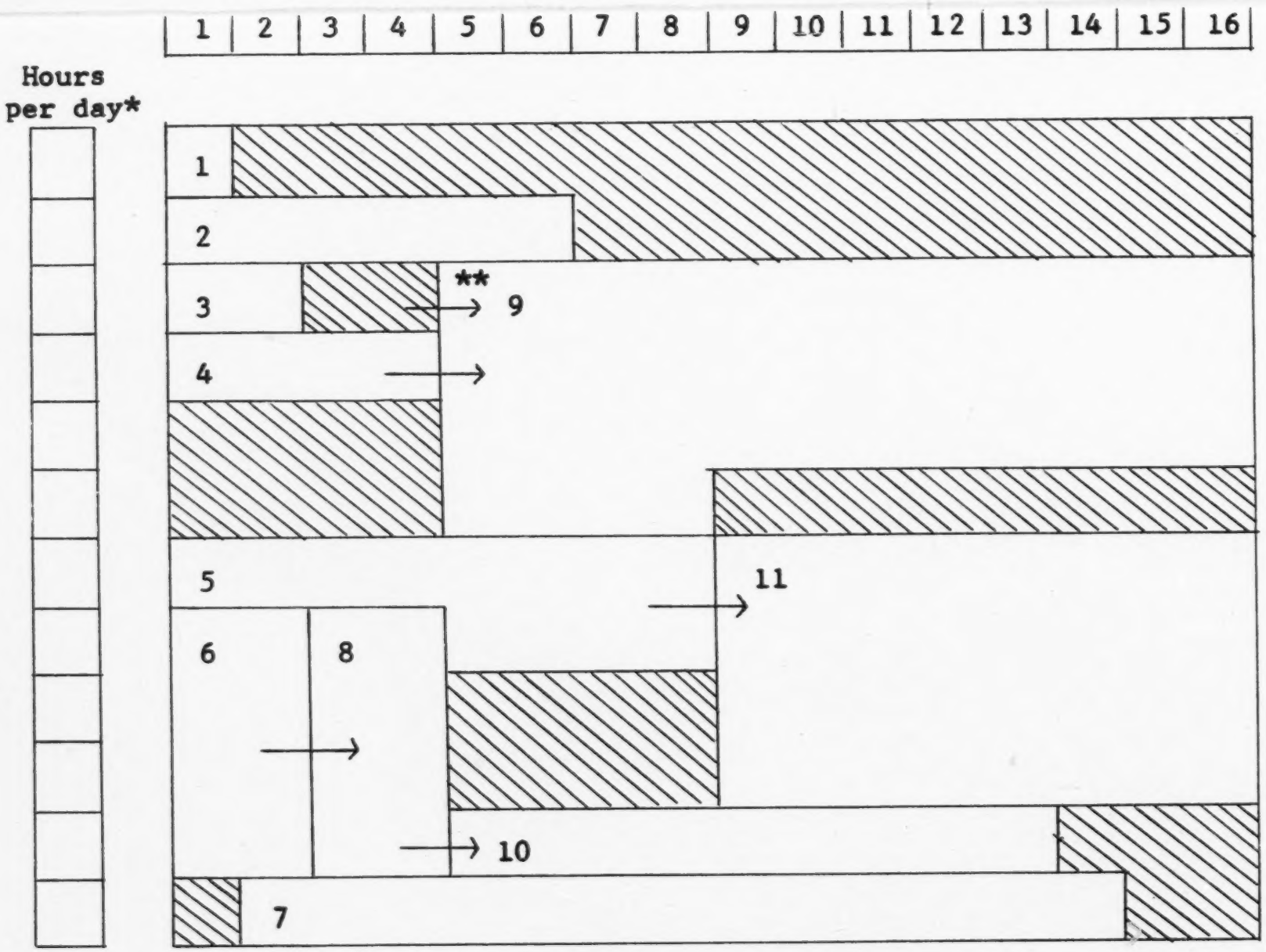
experimental certification program at Brigham Young University is one attempt to accomplish a given set of objectives. The program consists of two sequential phases. Phase I, Academic Preparation, consists of instructional activities designed to develop in the trainee capabilities necessary for effective performance in curriculum planning and teaching. Phase II, Student Teaching, provides opportunity for the trainee to use the instructional materials prepared in Phase I in an actual classroom situation.

Phase I--Academic Preparation

Phase I is a non-coursed, integrated presentation of academic content presently lasting one semester. (See Figure 1) Eventually semester bounds will disappear and students will be allowed to progress at their own individual rates through the program whether it takes one semester or more--hence the term continuous progress. Instead of requiring trainees to complete a given number of semester hours of class work, they are required to achieve the behavioral objectives of the program. These behaviors are arranged into eleven units. (See Figure 2.) No formal classes are held. Figure 3 shows how a student might achieve an objective. At the beginning of each unit the student is given a syllabus containing the behavioral objectives for the unit and, for some objectives, a pre-test designed to assess his mastery of prerequisite behaviors, as well as the degree to which he can already exhibit the performance specified for the objective. Following the

Phase I	Phase II
Academic Teacher Education and Curriculum Preparation (One or more semesters)	Curr. Prep. Cont'd Team Student Teaching (Block, semester, or full year)

Figure 1



Units

1. ORIENTATION
2. ADMINISTRATION
3. OBJECTIVES
4. MATERIALS
5. METHODS
6. DEVELOPMENT
7. MICRO-TEACHING
8. LEARNING
9. CURRICULUM PREPARATION
10. STUDENT MANAGEMENT
11. STUDENT TEACHING

Figure 2 COURSE LAYOUT

*This is intended to indicate the proportionate amount of time required for the various units; e.g., during the first week a student might spend an hour per day on units one through five and four hours per day on unit six.

**Arrows are used to indicate the prerequisite nature of some units.

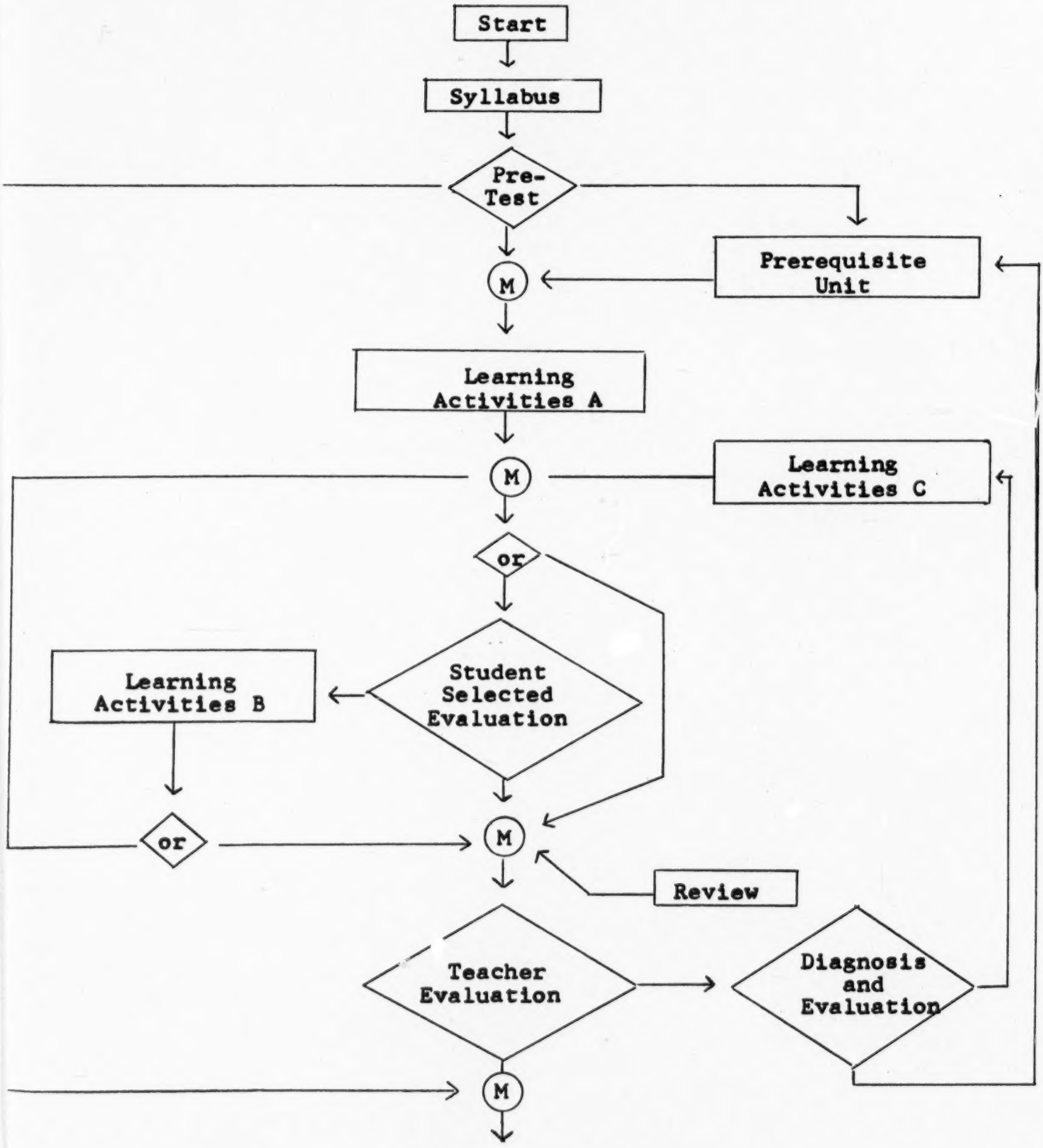

Start
Syllabus
Pre-
Test
Prerequisite
Unit
M
Learning
Activities A
M
Learning
Activities C
or
Student
Selected
Evaluation
Learning
Activities B
or
M
Review
Teacher
Evaluation
Diagnosis
and
Evaluation
M
To next objective

Figure 3

pre-test or upon receiving the unit where pre-tests are not applicable or are not yet available, the student counsels with one of a team of instructors assigned to the program and together they select from the syllabus those learning activities which will help the student exhibit terminal performance. If the pre-test shows that the student can already demonstrate the terminal behaviors, he will be allowed to omit it and concentrate on those he cannot demonstrate.

Students work through suggested learning activities individually or in small groups. The learning activities for a given objective are those which most effectively promote the specified behavior of the objective and are therefore appropriately diverse. For example, learning activities include observations in elementary, secondary, and special education classrooms. Single-concept lessons are micro-taught both with and without video-tape recording playback. Interaction analysis of the student's own and other teachers' classroom behavior is required. The use of a Remote Information Retrieval System allows our trainees to hear recorded audio tapes with or without accompanying visual materials. Straight-text and programmed reading materials are assigned and lectures are scheduled when necessary.

When the student finishes the required learning activities for a given objective, he is given a test designed to assess his attainment of the objective. These tests include a wide variety of activities and formats as required by the objective, and are not limited to paper-and-pencil devices.

If the student's performance is satisfactory, he moves to the next objective. If his performance is not satisfactory, he meets with one of the faculty members to identify additional learning experiences. A trainee may not certify until he accomplishes all objectives according to the established criteria.

While mastering the objectives which are necessary for effective instruction, the trainee is teamed with one or two other students in his subject matter specialty, and together they prepare curriculum materials to be used when they student teach. (See Figure 1.) Their overall objective here is to prepare materials which will allow them to individualize instruction. They write behavioral objectives, design and prepare learning activities, and pre- and post-test instruments. Some of the materials are completely programmed. During the preparation of curriculum materials observations are made in the classroom in which the team will student teach and materials are pre-tested with secondary students.

Phase II--Student Teaching

In phase two (see Figure 1) trainees are assigned as a team to a cooperating teacher in the public schools for the student teaching experience. Our students presently spend one-half day for eight weeks. We anticipate a future arrangement where both the kind and duration of student teaching assignment could be individualized with alternatives such as full or part year internships, teaching in multiple

kinds of classrooms in either rural or urban schools.

Curriculum materials used in student teaching are those previously prepared by the team. The same college instructors who supervised Phase I supervise the student teaching experience. Students continue to prepare and revise curriculum materials as they use them in the classroom. Students also micro-teach before video-recorders to improve needed teaching behaviors.

In summary, the experimental program at Brigham Young University has been in operation for four semesters. During this time we have trained more than 60 secondary teachers. Approximately one-half are presently teaching in the public schools, the other half (not drop outs) are continuing graduate work. We have not yet collected follow-up data on our graduates except through interviews with them and their employers. As a result of these data and observations we have made, the following strengths of the program seem apparent to us.

1. The program combines theory and practice.
2. Recommendation for certification is based on ability to perform specified behaviors.
3. Students accept more responsibility for their work in this kind of a program.
4. The program combines and is using many of the best methods for teacher training, such as inquiry training, interaction analysis, micro-teaching, curriculum design.

5. The program takes into account individual differences allowing the students to progress at their own best pace.
6. Students are team taught and they work as a team giving them opportunity to teach in large and small groups and to individualize as they student teach.
7. Areas of unnecessary overlap in the professional sequence of courses have been eliminated.
8. The program requires and results in effective in-service training for the cooperating teachers with whom we work.
9. Team student teaching by decreasing the number of classroom stations, allows us to be more selective in assigning classrooms and in assigning the very best cooperating teachers.
10. Activities such as micro-teaching, interaction analysis, and team student teaching reduce the possibility of a student teacher learning from one poor teacher model thus perpetuating the weaknesses of our present education system.
11. The graduates seem to differ in their positive attitude toward themselves as teachers and toward the profession of teaching.

APPENDIX L

EDUCATION

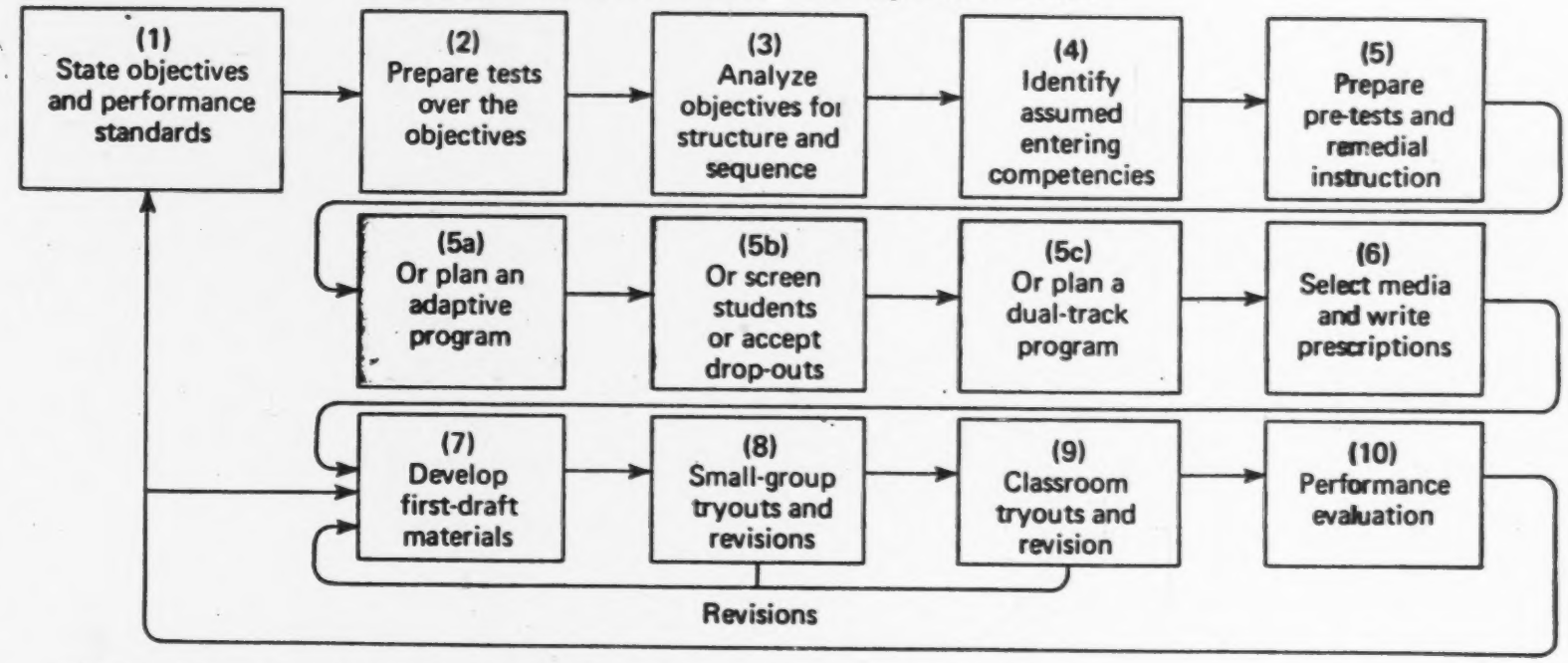
ADULT LEADERSHIP
AMERICAN EDUCATION
AMERICAN SCHOOL AND UNIVERSITY
AUDIOVISUAL INSTRUCTION
BRITISH JOURNAL OF EDUCATIONAL TECHNOLOGY
BUSINESS EDUCATION FORUM
BUSINESS EDUCATION WORLD
CHILDREN
CLEARING HOUSE
COLLEGE AND UNIVERSITY BUSINESS
COLLEGE MANAGEMENT
COLLEGE NEWSLETTER (NATIONAL CATHOLIC EDUCATION ASSOCIATION)
COLLEGIATE NEWS AND VIEWS
COMPACT
CONTEMPORARY EDUCATION
EDUCATION USA
EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT
EDUCATIONAL BULLETIN OF IOWA DEPT. #2 OF PUBLIC INSTRUCTION
EDUCATIONAL MEDIA
EDUCATIONAL RECORD
HARVARD EDUCATIONAL REVIEW
HIGHER EDUCATION AND NATIONAL AFFAIRS
HORN BOOK
IMPROVING COLLEGE AND UNIVERSITY TEACHING
JOURNAL OF BUSINESS EDUCATION
JOURNAL OF EDUCATIONAL PSYCHOLOGY
JOURNAL OF EDUCATIONAL RESEARCH
JOURNAL OF HIGHER EDUCATION
JOURNAL OF SECONDARY EDUCATION
JOURNAL OF TEACHER EDUCATION
LIBERAL EDUCATION
MOMENTUM
NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS BULLETIN
NATIONAL CATHOLIC GUIDANCE CONFERENCE JOURNAL
NORTH CENTRAL ASSOCIATION QARTERLY
NOTRE DAME JOURNAL OF EDUCATION
PHI DELTA KAPPAN
TEACHERS COLLEGE RECORD
RESEARCH IN EDUCATION
REVIEW OF EDUCATIONAL RESEARCH
SCHOOL AND SOCIETY
SCHOOL REVIEW
SOCIAL EDUCATION
TODAY'S EDUCATION (NEA JOURNAL)

EDUCATION--CURRICULUM LIBRARY

AUDIOVISUAL INSTRUCTION
EDUCATIONAL THEATRE JOURNAL
ELEMENTARY ENGLISH
ELEMENTARY SCHOOL JOURNAL
ELEMENTARY SCHOOL SCIENCE
GRADE TEACHER
HORN BOOK
THE INSTRUCTOR
MATHEMATICS TEACHER
MOMENTUM
READING TEACHER
SCHOOL ARTS
SCHOOL SCIENCE AND MATHEMATICS
SCIENCE AND CHILDREN
SOCIAL EDUCATION
THE SOCIAL STUDIES
TEACHING LANGUAGE THROUGH LITERATURE
TODAY'S EDUCATION (NEA)

APPENDIX M

FLOW CHART: A Model for the Design of Instruction


(1) State objectives and performance standards
(2) Prepare tests over the objectives
(3) Analyze objectives for structure and sequence
(4) Identify assumed entering competencies
(5) Prepare pre-tests and remedial instruction
(5a) Or plan an adaptive program
(5b) Or screen students or accept drop-outs
(5c) Or plan a dual-track program
(6) Select media and write prescriptions
(7) Develop first-draft materials
(8) Small-group tryouts and revisions
(9) Classroom tryouts and revision
(10) Performance evaluation
Revisions
Additional Revisions of Materials and/or Objectives and Performance Standards
If follow-up of graduates in advanced courses or on the job is possible, performance evaluations from these situations provide another source of data for course revision.

APPENDIX N

MEDIA ON HAND

1	Drymount Press, Technal
2	Filmstrip Previewers, Singer Graflex
2	Slide Viewers, Focal
1	Spirit Duplicator, Standard
1	Tape Recorder, audio, reel, Sony 3-speed
2	Tape Recorders, audio, cassette, Mallory
1	Thermo-Fax Copy Machine, 3M Secretary
1	Videotape Camera with viewfinder playback, Sony
1	Video Deck, portable AV-3400 Sony (New helical EIA)
1	Videotape Deck, CV-2200A Sony (old helical CV Series)
1	Videotape Deck, AV-3600 Sony (New helical EIA)
1	Radio, battery/electric, Realtone FM/AM portable
1	Record Player, Newcomb
2	Screens, portable, 60 X 60 and 70 X 70
1	Slide projector, Kodak Carousel
2	Slide/Filmstrip Projectors, Standard and School Master
1	Movie Projector, Regular 8, silent, Keystone
1	Movie Projector, Super 8 cartridge, Loop silent, Technicolor
1	Movie Projector, 16mm Sound, Victor
1	Movie Projector, 16mm Sound, Victor (Auditorium Projection Booth)
1	Movie Projector, 16mm Sound, Victor (Room 235 McAuley) (Does not work)
1	Movie Projector, 16mm Sound, RCA
1	Movie Projector, 16mm Sound, Bell/Howell (self threader)
1	Opaque Projector, Beseler Vu-Lyte III
2	Record Players, Califone and Newcomb with earphones (in Bound Periodical Room)
1	Tape Recorder, Wollensak 2 speed with earphone (listening carrels)
1	Overhead Projector, Beseler Porta Scribe
4	Overhead Projectors, Bell & Howell 302 (In 1L, 2L, AV, Conference Room)
1	Microfilm Reader, Recordak (Main Floor, Library)
1	Photo Copier, Apeco (Main floor, Library)
1	Spirit Duplicator, Standard (In Room 207 McAuley)
1	Record Player, Newcomb
1	Screen, portable, small
1	Slide/Filmstrip Projector, Standard, and cart
2	Tape Recorders, 3-speed Sony and 2-speed Wollensak
1	Movie Projector, 16mm sound, RCA, and cart
1	Overhead Projector, 3M, and cart
1	Overhead Projector, 3M portable (In Room 109 W)
1	Opaque Projector, Opascope (In Room 109 W)
1	Spirit Duplicator, Standard (3rd Floor Duplicator Room)
1	Thermo-Fax Copy Machine, 3M Secretary " " " "
11	Wall Screens: Nursing Lab, 109W, 110W, 202W, 308W, 310W, 312W, 1L, 2L, AV Room, Library Conference Room

MEDIA ON ORDER

Quantity	Item Description
1	Sony Model AV3400 Camera and portable (VTR) deck, battery/AS
2	Sony Monitors CVM-180UA
1	Sony tripod for camera VCT-29A
1	Sony VTR
10	1-hour tapes
1	16 mm sound film projector, 545T Bell and Howell f/1.4
1	8 mm loop film projector, 810 zoom technicolor
1	Overhead projector with technamation attachment Bell & Howell 301
1	Polarising spinner, Buhl adaptor Bracket Bell & Howell
1	Roller attachment 013225
1	Reel-to-reel tape recorder, Sony 105
1	Opaque projector, Bessler
1	Opaque plate & cover, Vu-Lyte III
1	DuKane film strip & cassette, 28A9 A V matic and slide adaptor
1	Dry Mount press, Technal 550
1	Paper cutter, Ingento 18"
1	Thermo Fax Secretary, 3M 45 Secretary
1	Spirit Duplicator, standard
1	Record player, monaural, newcomb EDT-20BM, N50
1	Compatible mike
1	Kodak Ectographic visual maker copy stand, Valiant PTM4
1	Tripod screen, EDVM 70 X 70

Quantity	Item Description
1	tachistoscope film strip machine, TT-30
4	Kodak camera, X-15
2	Kodak Carousel projector, B750ZA
1	8 mm projector, Bell & Howell 459Z
1	Super 8 movie camera, Bell & Howell 374F, F/2.8
1	Film editor & splicer, Valiant VES23
1	16 mm sound film projector, Bell & Howell 545T
1	35 mm single reflex f/1.8 Hanimex
1	Strobe flash for 35 mm above, Super TL
1	Polaroid CP II Camera, Color Pak II
4	Casette tape recorders, Mallory MCR 1209
4	Graflex filmstrip viewers, Study Mate
1 set	Elementary and secondary level health guidance filmstrip and cassettes
1 set	
1 set	
1 set	Elementary listening activity filmstrip & cassette
1	Special education record
2 sets	Elementary methods filmstrip and record
2 sets	Filmstrip
2 sets	
1 set	Elementary background filmstrip
1 set	
1 set	
1 set	
1 set	Elementary and secondary methods filmstrip & cassette
1 set	
1 set	
1 set	Student teacher interest stimulators filmstrip & casette
1 set	Student teacher lesson methods filmstrip & cassette
16 sets	Secondary Education Lesson Material

Quantity	Item Description
1 set	Elementary Social Studies Content Filmstrip & Cassette
1 set	Elementary and primary content record filmstrip
1 set	
1 set	
1 set	
1 set	
1 set	Elementary & secondary Remedial program filmstrip
1 set	filmstrip
2 loops	Elementary science content
3 loops	Instructional loops and films for media use and attendent skills
1 loop	
1 film	
30 films	
1 set	Maintenance tools & material
2 ea	Projection carts
3 ea	
2 ea	

BIBLIOGRAPHY

BOOKS

Belth, Marc. Education as a Discipline. Boston: Allyn and Bacon, Inc., 1965.

Gartner, Alan; Kohler, Mary Conway; and Riessman, Frank. Children Teach Children; Learning by Teaching. New York, Harper and Row,

Haefele, Donald, Compiler. Systems and Modeling: Self-Renewal Approaches to Teacher Education. Washington, D.C.: AACTE, 1971.

Mager, Robert. Preparing Instructional Objectives. Palo Alto, California: Fearon Publishing Co., 1964.

Morrison, Henry C. The Practice of Teaching in the Secondary School. Chicago: The University of Chicago Press, 1926.

Mount Mercy College Catalog. Cedar Rapids, Iowa: Mount Mercy College Printing office, 1970.

Taba, Hilda. Curriculum Development. New York: Harcourt, Brace, and World, Inc., 1962.

Tyler, Ralph W. "Investing in Better Schools". Agenda for the Nation. Edited by Kermit Gordon. New York: Doubleday and Co., Inc., 1969.

Sexton, Patricia Cayo. School Policy and Issues in a Changing Society. Boston: Allyn and Bacon, Inc., 1971.

Weinstein, Gerald and Fantini, Mario. Toward Humanistic Education: A Curriculum of Affect. New York: Praeger Publishers, 1970.

JOURNALS

AACTE Bulletin, (Dec., 1971).

Bard, Bernard, Education Editor. The New York Post. (Nov. 22, 1971)

Bunderson, Victor. "Computer-Assisted Instruction in Self-Paced Teacher Education." Paper presented at the annual meeting of the American Educational Research Association, Chicago, Feb., 1968.

Busser, Robert L. Unpublished research study. Southern Illinois University, Carbondale, Illinois, 1972.

Education and Youth Dept. of Hill and Knowlton, Inc. Youth and Careers in Education, Washington, D.C.: NCICE Office, 1971.

EPDA. Career Opportunities Program, Washington, D.C.: U.S. Dept. of Health, Education, and Welfare, 1971.

Office for Planning and Programming. The Final Report of the Governor's Advisory Committee. Improving Education for Iowans, Des Moines, Iowa, 1971.

Information Office, Conference for Educational Development and Research. "New Awareness," D and R Report, 1:3 (1971), 8-9.

Information Office, Conference for Educational Development and Research. "Employer-Based." D and R Report, 1:4 (1971), 17.

Jones, Harold, et al. Unpublished manuscript, Cedar Rapids Public School District, Cedar Rapids, Iowa, 1972.

Jones, Howard. College of Education Bulletin, (Feb. 10, 1972)

Moffet, J. Bryan. "Teacher Education-Some Ways to Improve It." Kappa Delta Pi Record, 8:2 (Dec., 1971), 47.

Robbins, Glaydon D. "New Preparation for Teachers". The Educational Forum, XXXVI:1 (Nov., 1971), 99-102.

Robinson, Roger. Unpublished manuscript. Southern Illinois University, Carbondale, Illinois, 1972.

Til, William Van, Guest Editor. "Curriculum for the 1970's." Phi Delta Kappas, LI:7 (March, 1970), 345.

Webb, Clark, and Baird, Hugh. "Learning Differences Resulting From Teacher-and Pupil-Centered Teaching Methods." Paper presented at the American Educational Research Association Annual Meeting, New York, Feb. 16-18, 1967.

Weldon, John J. "Curriculum History: A Synopsis." Unpublished manuscript, Carbondale, Illinois, 1970.

CASSETTES

Burns, Richard W., "The Theory of Expressing Objectives."

Cohen, Arthur M., "Technology: Thee or Me? (Behavioral Objectives and the College Teacher)."

Craik, Mary B., "Writing Objectives for Programmed Instruction--or any Instruction."

Harbeck, Mary B., "Instructional Objectives in the Affective Domain."

Jenkins, Joseph R., and Deno, Stanley L., "A Model for Instructional Objectives: Responsibilities and Advantages."

Johnson, Rita B., "Objectives-Based Accountability Procedures for the Classroom Use."

Kapfer, Philip G., "Behavioral Objectives and the Curriculum Professor."

Markle, Susan M., and Tiemann, Philip W., "Behavioral Analysis of Cognitive Content."

Miles, David T., and Robinson, Roger E., "Behavioral Objectives: An Even Closer Look."

Moore, J. William, "Instructional Design: After Behavioral Objectives What?"

Muchmore, John M., "Behavior Control: The Matter of Ethics."

Rosove, Perry E., "To Teach by Behavioral Objectives or Not?"